YUNKER & ASSOCIATES

Benjamin D. Allen P.O. Box 21784 Lexington, KY 40522-1784

859-255-0629 FAX: 859-255-0746 ballen@desuetude.com

JUL 0 7 2005 PUBLIC SERVICE COMMISSION

> July 7, 2005 VIA HAND-DELIVERY

Elizabeth O'Donnell, Executive Director Public Service Commission 211 Sower Boulevard P.O. Box 615 Frankfort, KY 40602-0615

Case No. 2003-00266, Investigation into the Membership of Louisville Gas and Electric Company and Kentucky Utilities Company in the Midwest Independent Transmission System

Operator, Inc.

Dear Ms. O'Donnell:

Enclosed please find the original of the Updated Supplemental Testimony of Dr. Ronald R. McNamara and Roger C. Harszy to be filed on behalf of the Midwest Independent Transmission System Operator, Inc. ("Midwest ISO"). The remaining copies of this testimony is being sent to the Commission today via U.P.S. overnight shipping for filing.

Thank you for your assistance in this matter.

Benjamin D. Allen

Sincerely,

Enclosures

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Investigation into the Membership of Louisville Gas and Electric Company and Kentucky Utilities Company in the Midwest Independent Transmission System Operator, Inc.

Case No. 2003-00266

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Updated Supplemental Testimony filed by Midwest Independent Transmission System Operator, Inc.

PUBLIC SERVICE COMMISSION

Midwest Independent Transmission System Operator, Inc. ("Midwest ISO") hereby files its Updated Supplemental Testimony of Dr. Ronald R. McNamara and Roger C. Harszy, with attachments. The Midwest ISO makes this filing pursuant to the order of the Commission, filed June 22, 2005. Included with this filing are the following: (a) Additional Supplemental Testimony of Dr. Ronald R. McNamara and its accompanying attachments; and (b) Supplemental Testimony of Roger C. Harszy.

Respectfully submitted,

Katherine K. Yunker Benjamin D. Allen YUNKER & ASSOCIATES P.O. Box 21784 Lexington, KY 40522-1784 (859) 255-0629 fax (859) 255-0746

Stephen G. Kozey
James C. Holsclaw
MIDWEST INDEPENDENT TRANSMISSION
SYSTEM OPERATOR, INC.
701 City Center Drive
Carmel IN 46032
(317) 249-5769
fax (859) 697-0792

Stephen L. Teichler DUANE MORRIS, LLP 1667 K. Street N.W., Suite 700 Washington, DC 20006-1608 (202) 776-7830

By:

ATTORNEYS FOR MIDWEST INDEPENDENT TRANSMISSION SYSTEM OPERATOR, INC.

CERTIFICATE OF FILING AND SERVICE

I hereby certify that on this the <u>7th</u> day of July, 2005, the original of the Midwest ISO's Updated Testimony, including attachments (with the remaining copies sent to the Commission for filing via U.P.S. overnight), was hand-delivered to the Commission for filing, and copies were sent, via U.P.S., to:

Beth Cocanougher LG&E ENERGY CORP. 220 West Main St. P.O. Box 32030 Louisville, KY 40232-2030

Elizabeth E. Blackford
Office of the Attorney General
UTILITY & RATE INTERVENTION
DIVISION
1024 Capital Center Drive; Suite 200
Frankfort, KY 40601-8204

David C. Boehm BOEHM, KURTZ & LOWRY Suite 2110 CBLD Building 36 East Seventh Street Cincinnati, OH 45202

Kendrick R. Riggs OGDEN, NEWELL & WELCH, PLLC 1700 Citizens Plaza 500 West Jefferson Street Louisville, KY 40202

A FIORNEY FOR THE MIDWEST ISO

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:	
Investigation into the Membership of Louisville Gas and Electric Company and Kentucky Utilities Company in the Midwest Independent Transmission System Operator, Inc.)) Case No. 2003-00266))

Updated Supplemental Testimony of

Dr. Ronald R. McNamara

Vice President of Market Management

Midwest Independent Transmission System Operator, Inc.

Filed: July 7, 2005

1	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	A.	My name is Ronald R. McNamara. I work at 701 City Center Drive, Carmel,
3		Indiana 46032.
4	Q.	WHAT ARE YOUR CURRENT RESPONSIBILITIES?
5	A.	I am the Vice President for Market Management at the Midwest ISO. In that
6		position, I am responsible for the operation of the day-ahead energy market, the
7		development and posting of final Locational Marginal Prices ("LMPs"), Market
8		Settlements, Financial Transmission Rights ("FTRs"), Market Analysis and
9		Regulatory Affairs.
10	Q.	ARE YOU THE SAME RONALD R. MCNAMARA WHOSE TESTIMONY
11		HAS PREVIOUSLY BEEN FILED IN THIS PROCEEDING?
12	A.	Yes, I am.
13		
14	Q.	WHAT IS THE PURPOSE OF THIS ADDITIONAL SUPPLEMENTAL
15		TESTIMONY?
16	A.	My testimony addresses specific areas of operation and settlement of the energy
17		markets implemented under the Midwest ISO's Transmission and Energy Markets
18		Tariff ("TEMT"). The Midwest ISO implemented its TEMT on April 1, 2005,
19		including the implementation of regional security constrained economic dispatch,
20		day-ahead and real-time energy markets, and a system of FTRs that are enabling
21		market participants to hedge the risks associated with the cost of transmission
22		congestion.

1	Q.	WOULD YOU PLEASE DESCRIBE THE ENERGY MARKETS THE
2		MIDWEST ISO HAS IMPLEMENTED?

The Midwest ISO has implemented a regional security constrained economic dispatch of generation resources in its footprint and resultant day-ahead and real-time energy markets. For an independent transmission operator to control power flows and efficiently manage transmission congestion, it must be able to objectively dispatch generation at different points in the grid. The price and quantity offers in Midwest ISO's energy markets allow generators owned by different companies to reveal their willingness to be dispatched at different levels and prices. The market clearing prices resulting, in part, from these offers provide an efficient, non-discriminatory way to compensate suppliers for the energy that they provide.

A.

The Midwest ISO has also implemented a day-ahead energy market that provides the means for parties to lock in energy and transmission usage charges on a day-ahead basis and then make business and operational decisions regarding real-time purchases, sales, and the operation of their generating units around these day-ahead positions. On average, over 90 percent of actual megawatts flowing during the operating day have been transacted in the day-ahead market and are paying either the day-ahead market clearing price or an energy price agreed to by parties to a bilateral contract.

1	Q.	HAS THE MIDWEST ISO ALSO IMPLEMENTED A SYSTEM OF FTRS?
2	A.	Yes. The Midwest ISO has allocated peak and off-peak FTRs for the spring and
3		summer seasons of 2005 and will soon complete the allocation of FTRs for fall
4		and winter of 2005 and spring of 2006. Additionally, three monthly FTR auctions
5		have been held in which market participants have purchased or sold more than
6		23,000 MW of FTRs, taking advantage of opportunities to acquire additional
7		FTRs and improve their FTR portfolio.
8	Q.	CAN YOU PLEASE DESCRIBE THE INFORMATION CURRENTLY
9		AVAILABLE REGARDING OVERALL MARKET PERFORMANCE?
10	A.	As this testimony is being prepared, the Midwest ISO is beginning its fourth
11		month of market operations. A summary of market results for April and May are
12		contained in Monthly Market Committee Reports, which are attached to my
13		testimony and identified as Attachments RRM-1 and RRM-2, respectively.
14		During these first two months of operation, market participants were participating
15		in the market under a transitional mechanism specified by the Federal Energy
16		Regulatory Commission that required them to submit cost-based offers for
17		generation resources in both the day-ahead and real-time energy markets, as well
18		as in the Reliability Assessment Commitment ("RAC") process. The purpose of
19		this transitional mechanism was "to afford the Midwest ISO and market
20		participants experience with energy markets and congestion pricing under LMP
21		prior to allowing for the less restrictive energy bidding proposed under the
22		TEMT." Midwest Independent System Operator, 108 FERC ¶ 61,163 (August 6,
23		2005).

1	Q.	WHAT HAS BEEN THE OVERALL EXPERIENCE IN MIDWEST ISO
2		ENERGY MARKETS OVER THE PERIOD FOR WHICH DATA IS
3		AVAILABLE?
4	A.	The market is successfully clearing a large volume of resource offers and both
5		fixed and price sensitive load bids. In addition to matching demand bids and
6		offers to supply power at specific load and generator locations, the Midwest ISO
7		established four trading hubs in Cinergy, Illinois, Michigan, and Minnesota.
8		Table RRM-1 provides data on the dollar and MW volume of transactions that
9		were cleared in the market in April and May 2005.
10		
11	Q.	DOES THE MIDWEST ISO ALSO GATHER DATA THAT IS SPECIFIC
12		TO LG&E AND KU?
13	A.	Yes. The Midwest ISO maintains a settlement process that settles transactions
14		involving LG&E and KU in the Midwest ISO energy markets. Following the
15		Midwest ISO's standard settlement calendar:
16		• The results of each operating day are initially processed to produce a
17		preliminary settlement statement seven calendar days after the operating
18		day.
19		 These preliminary settlement results are provided to market participants,
20		who are expected to review and verify the accuracy of the settlement input
21		data. Market participants have the opportunity to identify any
22		discrepancies.

1		 Then a second settlement statement is issued 14 days after the operating
2		day. Market participants are not invoiced for operating day charges and
3		credits until both the seventh and fourteenth day settlements have been
4		completed.
5		 Two additional settlement statements typically will be calculated at 55 and
6		105 days after the operating day to accommodate updates to the electrical
7		meter data that is submitted by market participants. All market
8		participants must submit their final meter data to the Midwest ISO prior to
9		the 105-day settlement.
10		The settlement process with respect to the first months of market operations is not
11		yet complete. For portions of June 2005, when LG&E and KU had the
12		opportunity to submit market-based generation offers, only the initial preliminary
13		settlement results are currently available.
14	Q.	BASED ON THE INFORMATION THAT IS AVAILABLE FOR LG&E AND
15		KU CAN YOU REACH ANY CONCLUSIONS ABOUT THE INCLUSION
16		OF THESE COMPANIES IN THE MIDWEST ISO ENERGY MARKETS?
17	A.	Yes. So far, one clear conclusion is that regional markets based on LMP can be
18		vital to the efficient utilization of the assets of these companies. We have been
19		able to observe the location specific prices in the Midwest ISO's day-ahead and
20		real-time energy markets for different locations across the LG&E / KU system.
21		Figure RRM-1 shows actual day-ahead LMPs for a sample of LG&E / KU
22		generating units at 2:00 p.m. on May 12, 2005. Figure RRM-2 shows comparable
23		day-ahead LMPs based on market bids for 2:00 p.m. on June 14, 2005. In each of

these examples, the LMPs at the Tyrone Generating Station located downst	ream
from the Blue Lick constraint are significantly higher than the LMPs near the	he
Companies' Louisville load center. The Tyrone Generating Station has one	e
coal-fired and two oil-fired steam generators. In the absence of LMP signa	ıls, the
Tyrone Generating Station oil-fired units typically would be used only whe	en the
demand for electricity is unusually high. However, the Midwest ISO mark	ets
have been able to identify hours in which generation at the Tyrone General	ting
Station is particularly valuable due to its ability to provide counter flow ov	'er
constrained flowgates and thereby lower overall costs. Additionally, in the	ese
hours, the market value of generation at the Companies' Ghent facility is	
significantly lower than LMPs in other parts of LG&E / KU, going down to	to \$8.69
at one of the Ghent buses on May 12th. When the system is less constrained	ed, there
have been smaller price differences across the Companies' service territor	y. The
market is making transparent the substantial variance in the economic value	ue of
resources at different locations on the grid and at different times. Such	
transparency is essential to management of congestion in the transmission	ı system
and efficient utilization of assets.	
Additionally, my colleague Mr. Harszy will address the reliable and effic	ient
utilization of LG&E and KU transmission facilities under the TEMT from	n an
operational perspective.	

1		Overall, this experience is consistent with the conclusion that efficient regional
2		security-constrained economic dispatch, congestion management that reflects
3		regional power flows, and regional real-time and day-ahead energy markets can
4		provide significant economic benefits to LG&E / KU, given the significant
5		influence that external power flows have on the operation of their system.
6		
7	Q.	HOW IS THE MIDWEST ISO EVALUATING THE PERFORMANCE OF
8		ITS ENERGY MARKETS?
9	A.	The first three months of market implementation have been a period in which the
10		Midwest ISO gained experience with the operation of the markets and is further
11		understanding the concerns and market behavior of participants. The evaluation
12		of market performance is occurring in:
13		 The analysis of market data by our market analysis group and discussions
14		of the results with our stakeholders;
15		The Independent Market Monitor's ongoing evaluation market
16		performance; and
17		 Process reviews to identify lessons learned and ways to enhance the
18		economic and reliability benefits provided to our members.
19		The Midwest ISO is continuing to work with our stakeholders and working to
20		maximize the economic and reliability benefits of TEMT implementation for our
21		members.
22		

- 1 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 2 A. Yes.

STATE OF INDIANA)	SS:
COUNTY OF HAMILTON)	

VERIFICATION

The answers in the foregoing testimony are true and correct to the best of my knowledge and belief.

Ronald R. McNamara

Subscribed and sworn to before me, a Notary Public, on this 6th day of July 2005..

Notary Public

DOROTHY M. SHUTE NOTARY PUBLIC, State of Indiana My County of Residence: Hendricks My Commission Expires: May 8, 2009

(SEAL)

Table RRM-1: Transactions Cleared Midwest ISO Day-Ahead Energy Market in April and May 2005

Jable Mini-1. 11 ansaying	CITOTING CITOTING	•		
	April 2005 (MW)	April 2005 (\$)	May 2005 (MW)	May 2005 (\$)
	(,, =, ;) 2007 111/11			A C COO OCA OLA L &
10 1.4	39 219 902 00	\$ 1.735.696.920.82	42,243,680.90	\$ 1,410,420,002.34
Load: Fixed Bids Cleared	00.707,717,70	100000	01 000 017 1	31 3CL 631 CS &
Possoci D. L. T.	1 157 537 80	\$ 55.395.679.71	1,419,839.10	07.771,707,40
Load: Price Sensitive bids Cleared	1,17,000			01/20 000 070 00
T 1 11. 1 1 1 1 1 1	3 540 569 36	\$ 135,720,459.01	5,476, /97.70	\$100,700,027.07
Load: Virtual Bids Cleared	00:100:00			0 1 621 062 757 60
17 1 17	43 918 009 16	\$ 1.926.813.059.54	49,090,327.70	\$ 1,031,003,737.03
Intal Load Cleared	01.00,017,01	(-6 -6 - 6	07 100 110 01	6 1 277 506 000 64
10 00 C	40 952 217 10	\$ 1,603,694,614.34	43,255,991.40	\$ 1,5 / /,500,000.04
Resource: Offers Cleared	40,777,77	2,000,00	07 707 172 7	C 110 117 521 67
Potton Office of	3 103 057 70	\$ 323,118,445.20	4,547,494.40	3 140,142,334.04
Resource: Virtual Offers Cicarcu	21:100600160		00 201 000 21	0 1 575 610 615 JG
Tares Chamber Closed	44.055.274.80	\$ 1,926,813,059.54	47,803,483.80	07:010:040:070:1
I Otal Supply Cicalcu				

April Monthly Market Committee Report

If you have any comments, questions or suggestions on this report, please contact either:

Christine Harrell

317-249-5815 or Charrell@MidwestISO.org

 \mathbf{Or}

Paul Gribik

317-249-5146 or Pgribik@MidwestISO.org

April Monthly Market Committe Report

April Market Summary

April Day Ahead Summary - Dollars Cleared (Excluding Imports and Exports)

Load Information

Price Sensitive Bids Cleared Load Virtual Bid Cleared at Interface \$ 1.00	705 606 000 80
Price Sensitive Bids Cleared Load Virtual Bid Cleared at Interface Virtual Bid Cleared at Cinergy Hub \$ 1	735,696,920.82
Virtual Bid Cleared at Interface \$ Virtual Bid Cleared at Cinergy Hub \$	55,395,679.71
Virtual Bid Cleared at Cinergy Hub	38,101,900.89
Virtual Bid Cleared at Illinois Hub	39,209,736.68
	782,116.90
Viitual blu Cleared at Illinois Flas	9,512,335.91
Virtual bid Cleared at Michigan Flab	2,072,727.08
Virtual Bid Cleared at Minnesota 1145	8,008,401.06
Virtual Bids Cleared at Load Zones \$	•
Virtual Demand Bids Cleared at Generation Nodes \$	38,033,240.49
Total Cleared Load \$1	<u>,926,813,059.54</u>

Supply

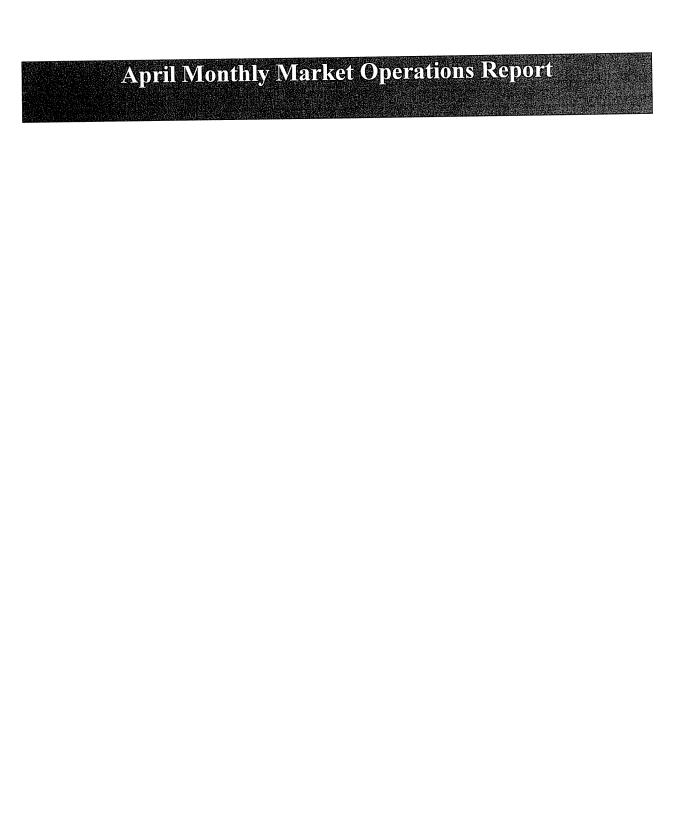
Virtual Offer Cleared at Cinergy Hub	\$	31,226,519.28
Virtual Offer Cleared at Michigan Hub	\$	10,344,414.24
Virtual Offer Cleared at Minnesota Hub	\$	1,211,474.70
Virtual Offer Cleared at Illinois Hub	\$	3,523,181.52
Virtual Offer Cleared at Interface	\$	8,702,490.22
Virtual Offer Cleared at Load Zones	\$	23,059,784.73
Virtual Supply Offer Cleared at Generation Nodes	\$	59,337,342.59
	\$ 1	,603,694,614.34
Resource Offers Cleared		,741,099,821.62
Total Cleared Supply	<u>Ψ</u> 1	,771,000,021102

April Day Ahead Summary - MW Cleared (Excluding Imports and Exports)

Load Information	$\overline{\mathbf{M}}\mathbf{W}$
Fixed Bid Cleared MW at Load Zones	39,219,902.00
Price Sensitive Bids Cleared MW at Load Zones	1,157,537.80
Virtual Bid Cleared MW at Interface	1,023,448.50
Virtual Bid Cleared MW at Cinergy Hub	970,000.40
Virtual Bid Cleared MW at Illinois Hub	17,092.00
Virtual Bid Cleared MW at Michigan Hub	227,234.40
Virtual Bid Cleared MW at Minnesota Hub	55,102.40
Virtual Bid Cleared MW at Load Zones	183,246.10
	1,064,445.56
Virtual Bid Cleared at Generator CPNodes	43,918,009.16
Total Load	

Supply

Virtual Offer Cleared MW at Interface Virtual Offer Cleared MW at Cinergy Hub Virtual Offer Cleared MW at Illinois Hub Virtual Offer Cleared MW at Michigan Hub Virtual Offer Cleared MW at Minnesota Hub Virtual Offer Cleared MW at Load Zones Virtual Offer Cleared MW at Generation CPNodes Resource Offers Cleared	MW 200,864.80 693,331.10 67,897.00 210,537.00 24,682.80 531,179.70 1,374,565.30 40,952,217.10
Resource Offers Cleared Total Supply	44,055,274.80



April Pricing Summary

Pricing Information - Hubs

Cinergy Hub

Illinois Hub

Date	Daily Minimum Price	Average Daily Price	Daily Maximum Price
01-Apr-05	20.26	33.14	92.31
02-Apr-05	26.79	48.94	112.50
03-Apr-05	21.16	31.59	87.75
04-Apr-05	21.95	58.27	139.99
05-Apr-05	20.93	39.58	70.37
06-Apr-05	17.77	36.95	71.39
07-Apr-05	17.40	39.55	80.12
08-Apr-05	17.72	32.32	71.95
09-Apr-05	16.47	29.20	66.37
10-Apr-05	15.57	33.89	80.94
11-Apr-05	19.09	45.73	102.28
12-Apr-05	22.35	50.02	98.74
13-Apr-05	22.41	45.66	82.69
14-Apr-05	24.13	49.23	89.94
15-Apr-05	17.90	37.28	70.94
16-Apr-05	18.03	32.75	65.08
17-Apr-05	15.37	28.41	60.79
18-Apr-05	14.65	51.17	95.79
19-Apr-05	15.96	52.83	91.43
20-Apr-05	19.83	45.34	89.53
21-Apr-05	18.39	50.83	105.09
22-Apr-05	20.24	44.57	101.92
23-Apr-05	26.44	46.62	110.81
24-Apr-05	21.13	30 27	68.30
25-Apr-05	20.16	38.48	80.83
26-Apr-05	18.05	45.83	111.48
27-Apr-05	23.12	48.28	79.41
28-Арг-05	23.06	50.72	86.40
29-Apr-05	19.71	41.07	92.37
30-Apr-05	17.89	29.83	92.88

Date	Daily	Average Daily	Daily
Ì	Minimum	Price	Maximum
	Price		Price
01-Apr-05	19.48	32.37	92.31
02-Apr-05	26.34	48.13	110.46
03-Apr-05	20.54	30.99	86.72
04-Apr-05	21.80	58.79	136.79
05-Apr-05	20.41	39.35	70.18
06-Apr-05	17.42	36.88	71 69
07-Apr-05	17.09	39.33	79.52
08-Apr-05	17.27	32.06	71.87
09-Apr-05	16.13	29.55	72.49
10-Apr-05	15.25	34.74	79.94
11-Apr-05	18.64	45.22	100.67
12-Apr-05	21.62	49.46	96.37
13-Apr-05	21.84	45.14	81.81
14-Apr-05	23.82	48.08	89.27
15-Apr-05	17.51	37.04	70.88
16-Apr-05	17.62	32.16	63.63
17-Apr-05	14.99	27.73	59.58
18-Apr-05	14.31	50.51	94.94
19-Apr-05	15.67	52.52	92 12
20-Apr-05	19.57	44.99	89.31
21-Apr-05	17.92	50.36	104.79
22-Apr-05	19.66	43.91	100.38
23-Apr-05	25.70	45.42	i
24-Apr-05	20.27	29.05	t
25-Apr-05	19.75	37.93	
26-Apr-05	17.53	45.52	
27-Apr-05	22.30	47.52	I make the second of the secon
28-Apr-05	22.31	49.47	I compared to the compared to
29-Apr-05	19.17	40.26	
30-Apr-05	17.25	28.80	90.08

April Pricing Summary

Pricing Information - Hubs

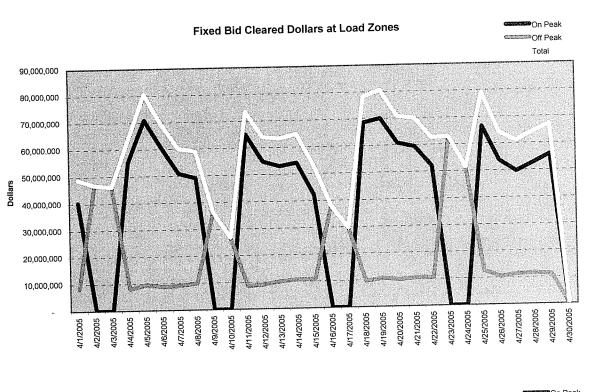
Michigan Hub

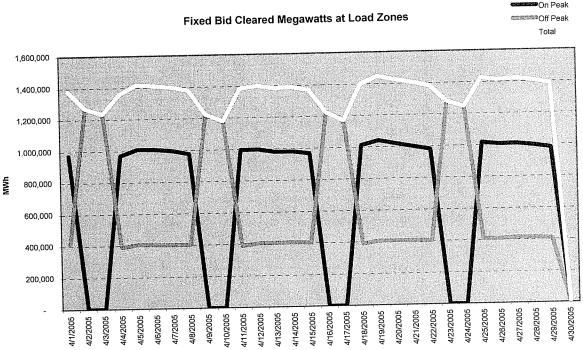
Minnesota Hub

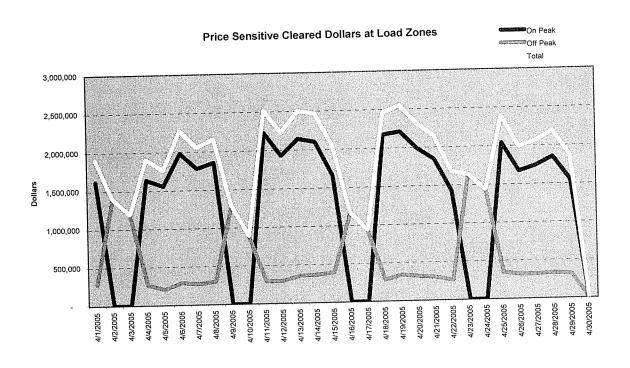
Date	Daily	Average Daily	Daily
	Minimum	Price	Maximum
	Price		Price
01-Apr-05	21.05	34.49	96.22
02-Apr-05	27.50	50.33	115.34
03-Apr-05	21.70	32.87	90.03
04-Apr-05	22.85	64.92	147.17
05-Apr-05	21.64	41.68	73.02
06-Apr-05	18.53	39.67	76.95
07-Apr-05	17.93	41.97	85.33
08-Apr-05	18.53	33.97	75.75
09-Apr-05	17.10	32.84	89.65
10-Apr-05	16.27	39.84	83.86
11-Apr-05	19.74	47.30	104.82
12-Apr-05	23.46	52.01	106.25
13-Apr-05	23.38	47.82	86.79
14-Apr-05	24.97	51.10	93.36
15-Apr-05	18.57	38.75	73.68
16-Apr-05	18.66	34 05	67.60
17-Apr-05	15.89	29.63	63.34
18-Apr-05	15.20	52.80	97.74
19-Apr-05	16.37	54.40	The same of the sa
20-Apr-05	21.24	47.05	
21-Apr-05	19.02	52.57	i
22-Apr-05	20.90	45.95	
23-Apr-05	26.98	48.03	1
24-Apr-05	21.66	30.19	
25-Apr-05	21.50	41.31	
26-Apr-05	18.95	49.16	
27-Apr-05	24.20	50.91	
28-Apr-05	24.17	53.27	
29-Apr-05	20.54	43.00	
30-Apr-05	18.50	31.13	97.64

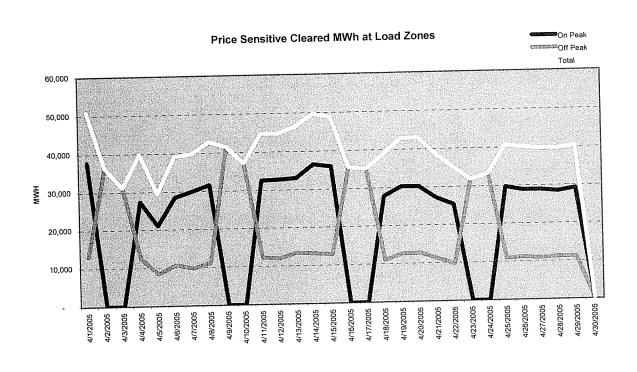
Date	Daily	Average Daily	Daily
	Minimum	Price	Maximum
	Price		Price
	155		
01-Apr-05	16.76	28.05	47.47
02-Apr-05	13.24	40.19	103.18
03-Apr-05	12.58	23.02	55.79
04-Apr-05	10.60	45.04	124.53
05-Apr-05	9.09	32.87	71.24
06-Apr-05	12.24	30.15	62.53
07-Apr-05	12.67	37.34	82.57
08-Apr-05	13.13	31.81	74.23
09-Apr-05	14.69	26.82	67.88
10-Apr-05	10.86	31.30	78.16
11-Apr-05	11.80	42.04	102.94
12-Apr-05	12.69	33.73	64.76
13-Apr-05	15.60	42.99	83.64
14-Apr-05	18.23	42.62	91.57
15-Apr-05	11.49	34.13	73.50
16-Apr-05	16.52	32.18	63.17
17-Apr-05	14.24	27.42	61.09
18-Apr-05	10.71	52.75	
19-Apr-05	14.55	53.85	
20-Apr-05	18.13	45.64	
21-Apr-05	12.83	50.04	i
22-Apr-05	18.26	43.73	A CONTRACTOR OF THE PARTY OF TH
23-Apr-05	25.66	44.73	
24-Apr-05	18.21	28 88	
25-Apr-05	9.87	38.38	1
26-Apr-05	11.92	45.59	The second secon
27-Apr-05	20.78	49.61	
28-Apr-05	16.18	49.50	
29-Apr-05	18.26	1	- I
30-Apr-05	15.22	28.95	97.03

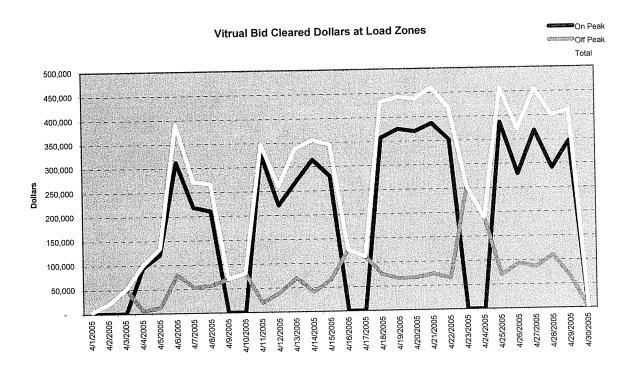
Monthly Bid Detail by Day

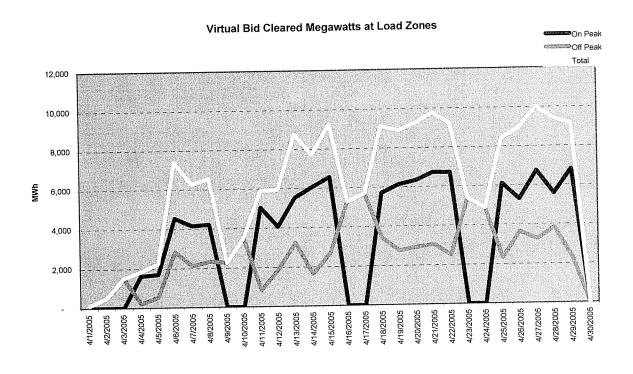


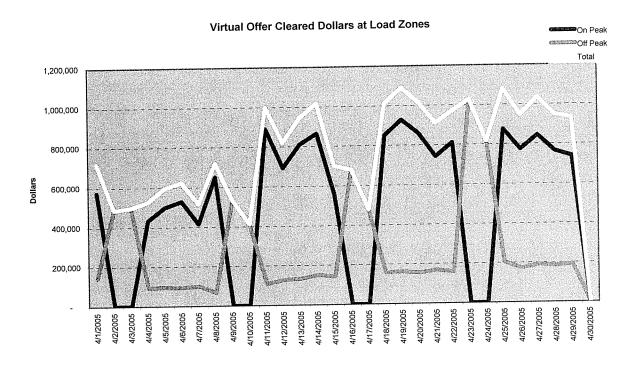


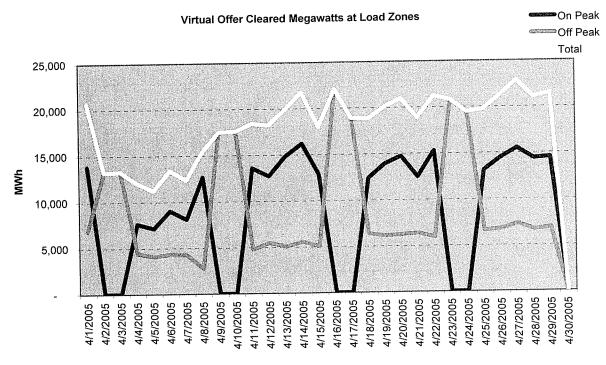


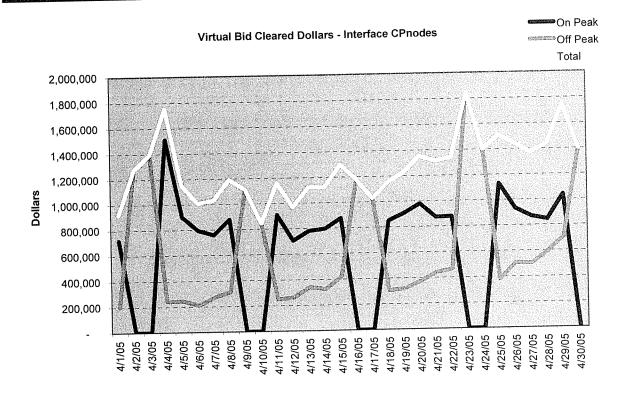


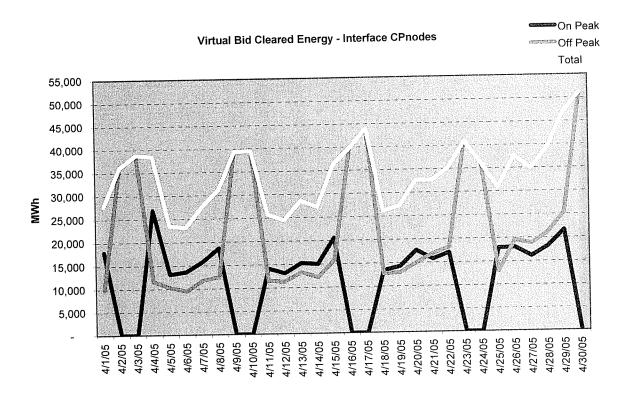


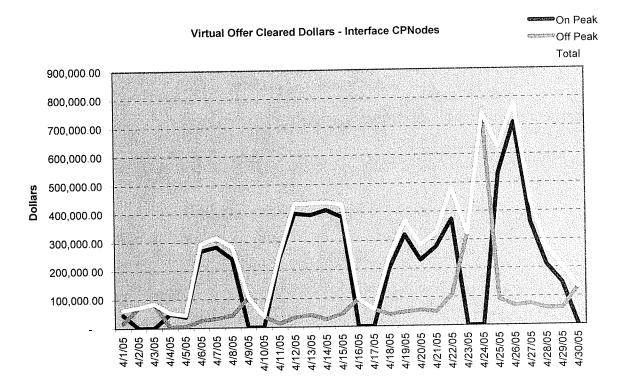


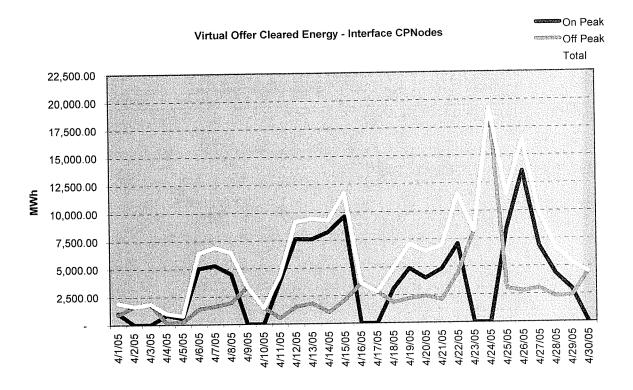


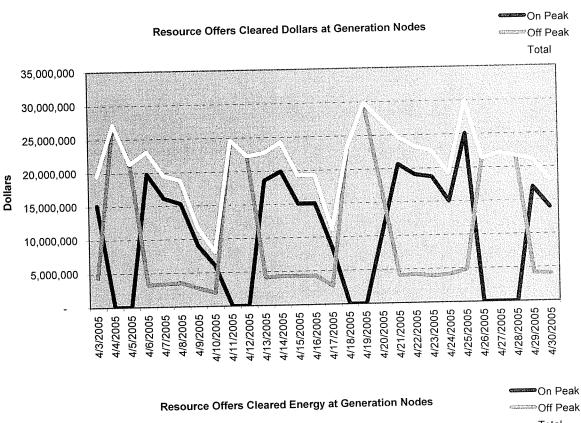


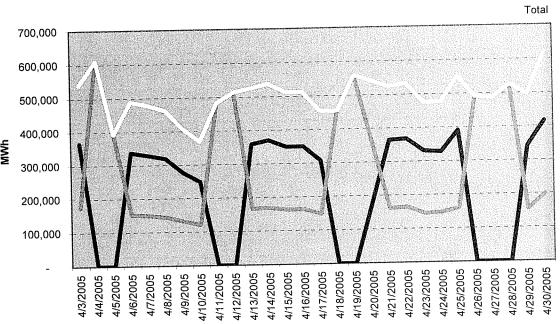


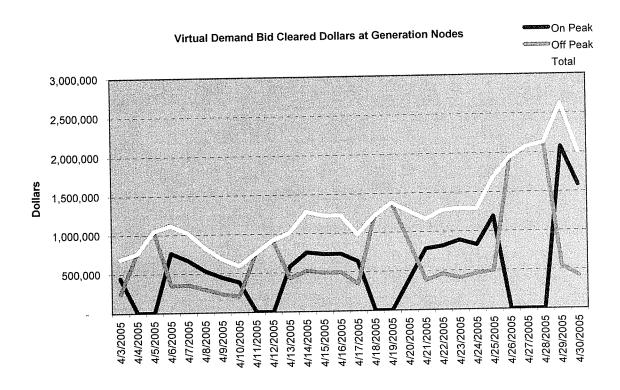


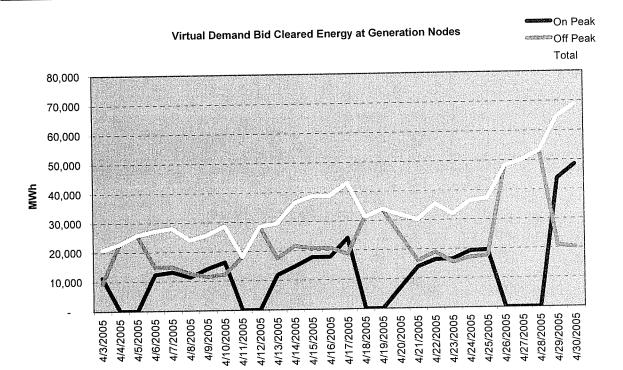


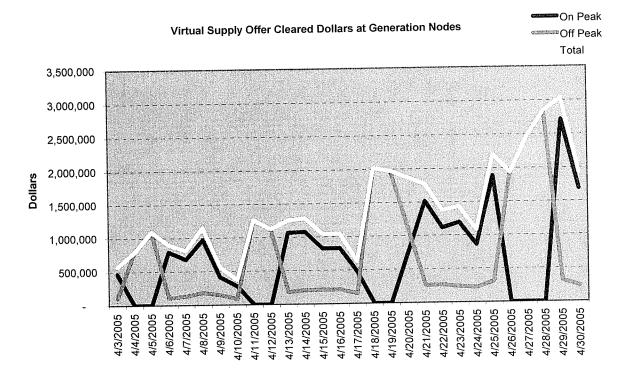


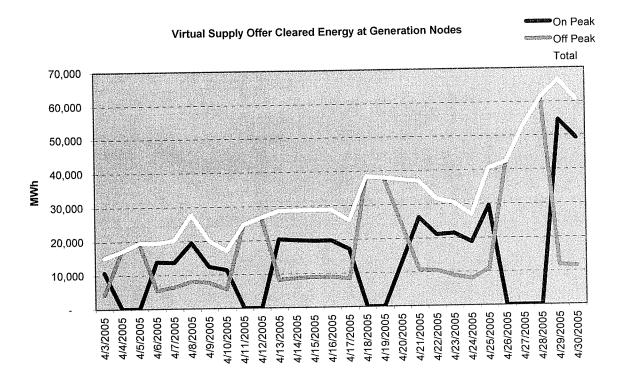












Day-Ahead Daily MWh for Fixed Bids Submitted*

Date	On Peak	Off Peak	Total
04/01/05	972,100.90	408,670.10	1,380,771.00
04/02/05		1,270,829.00	1,270,829.00
04/03/05	-	1,234,924.10	1,234,924.10
04/04/05	969,980.80	389,504.50	1,359,485.30
04/05/05	1,008,945.10	408,463.80	1,417,408.90
04/06/05	1,006,230.00	403,814.00	1,410,044.00
04/07/05	997,322.30	402,386.20	1,399,708.50
04/08/05	976,113.10	402,658.40	1,378,771.50
04/09/05	-	1,222,895.10	1,222,895.10
04/10/05	-	1,179,730.80	1,179,730.80
04/11/05	995,022.80	389,380.50	1,384,403.30
04/12/05	997,018.30	403,686.70	1,400,705.00
04/13/05	980,493.50	405,347.50	1,385,841.00
04/14/05	981,391.70	407,637.70	1,389,029.40
04/15/05	966,830.10	402,609.90	1,369,440.00
04/16/05	-	1,221,967.40	1,221,967.40
04/17/05	-	1,170,602.60	1,170,602.60
04/18/05	1,011,672.90	388,958.60	1,400,631.50
04/19/05	1,040,245.50	406,569.00	1,446,814.50
04/20/05	1,020,251.90	405,056.40	1,425,308.30
04/21/05	999,076.60	406,367.90	1,405,444.50
04/22/05	979,945.00	402,666.40	1,382,611.40
04/23/05	_	1,280,058.60	1,280,058.60
04/24/05	-	1,246,640.90	1,246,640.90
04/25/05	1,016,541.20	408,937.60	1,425,478.80
04/26/05	1,005,229.20	406,986.90	1,412,216.10
04/27/05	1,007,812.20	414,003.30	1,421,815.50
04/28/05	996,313.60	412,185.60	1,408,499.20
04/29/05	980,664.00	407,245.80	1,387,909.80
04/30/05	-	1,245,826.00	1,245,826.00
Totals	20,909,200.70	19,556,611.30	40,465,812.00
	<u></u>	-	

^{*}Submitted includes both accepted and not accepted bids.

Day-Ahead Daily MWh for Price Sensitive Bid Submitted*

Date	On Peak	Off Peak	Total
04/01/05	44,944.20	13,939.80	58,884.00
04/02/05	_	44,172.20	44,172.20
04/03/05	pa.	40,012.70	40,012.70
04/04/05	38,325.80	13,708.60	52,034.40
04/05/05	33,655.70	9,037.20	42,692.90
04/06/05	39,530.10	11,840.00	51,370.10
04/07/05	34,534.10	10,767.50	45,301.60
04/08/05	36,090.60	12,334.00	48,424.60
04/09/05	w-	44,685.00	44,685.00
04/10/05	-	39,942.10	39,942.10
04/11/05	40,505.30	13,255.90	53,761.20
04/12/05	36,738.40	13,142.20	49,880.60
04/13/05	39,020.80	14,994.60	54,015.40
04/14/05	40,973.00	14,971.40	55,944.40
04/15/05	39,639.00	14,707.10	54,346.10
04/16/05	-	39,711.30	39,711.30
04/17/05	-	40,224.30	40,224.30
04/18/05	36,124.70	12,345.00	48,469.70
04/19/05	36,696.60	13,812.40	50,509.00
04/20/05	33,933.50	13,816.30	47,749.80
04/21/05	31,762.90	12,351.20	44,114.10
04/22/05	29,089.40	10,915.20	40,004.60
04/23/05	-	37,517.20	37,517.20
04/24/05	-	37,266.10	37,266.10
04/25/05	34,020.10	12,204.00	46,224.10
04/26/05	32,554.80	12,208.80	44,763.60
04/27/05	33,008.80	11,985.70	44,994.50
04/28/05	35,549.50	12,395.70	47,945.20
04/29/05	33,029.10	12,345.40	45,374.50
04/30/05	-	35,819.00	35,819.00
Totals	759,726.40	626,427.90	1,386,154.30

*Submitted includes both accepted and not accepted bids.

Day-Ahead Daily MWh for Virtual Bid Submitted

Date	On Peak	Off Peak	Total
04/01/05	1,786.20	133.60	1,919.80
04/02/05	-	2,033.40	2,033.40
04/03/05	-	4,432.40	4,432.40
04/04/05	2,440.10	240.40	2,680.50
04/05/05	3,162.40	916.40	4,078.80
04/06/05	6,662.00	7,396.00	14,058.00
04/07/05	5,260.40	6,490.40	11,750.80
04/08/05	7,162.00	8,648.50	15,810.50
04/09/05	-	5,413.00	5,413.00
04/10/05	-	7,118.00	7,118.00
04/11/05	6,822.00	3,411.00	10,233.00
04/12/05	4,646.00	6,829.50	11,475.50
04/13/05	6,622.00	8,789.00	15,411.00
04/14/05	7,515.80	7,508.00	15,023.80
04/15/05	6,983.50	7,758.00	14,741.50
04/16/05	-	5,960.00	5,960.00
04/17/05	-	9,555.80	9,555.80
04/18/05	7,039.80	7,452.40	14,492.20
04/19/05	9,202.00	8,016.00	17,218.00
04/20/05	7,622.00	8,296.00	15,918.00
04/21/05	9,492.00	8,366.00	17,858.00
04/22/05	7,765.40	7,485.50	15,250.90
04/23/05	_	7,140.00	7,140.00
04/24/05	-	6,834.00	6,834.00
04/25/05	7,075.00	2,489.00	9,564.00
04/26/05	5,525.00	4,024.00	9,549.00
04/27/05	7,711.00	3,620.00	11,331.00
04/28/05	7,443.00	5,036.00	12,479.00
04/29/05	7,962.00	3,031.00	10,993.00
04/30/05	_	8,778.00	8,778.00
Totals	135,899.60	173,201.30	309,100.90
04/29/05 04/30/05	7,962.00	3,031.00 8,778.00	10,993 8,778.

*Submitted includes both accepted and not accepted bids.

Day Ahead Hourly Detail for the Month

	Day-Ahead Congestion Rebate on Carve-Out Grandfatered Agreements (\$)	
01-Apr-05	and the second s	
02-Apr-05	(32.23)	
03-Apr-05	(26.00)	
04-Apr-05	(0.60)	
05-Apr-05	1,902.31	
06-Apr-05	7,114.11	
07-Apr-05	(663.48)	
08-Apr-05	(8,350.26)	
09-Apr-05	1,510.02	
10-Apr-05	313.13	
11-Apr-05	(545.28)	
12-Apr-05	8,888.03	
13-Apr-05	(1,972.76)	
14-Apr-05	(1,686.24)	
15-Apr-05	1.09	
16-Apr-05	2,036.15	
17-Apr-05	(16.11)	
18-Apr-05	(4,971.42)	
19-Apr-05	(6,419.86)	
20-Apr-05	(2,908.10)	
21-Apr-05	(11,789.31)	
22-Apr-05	(445.82)	
23-Apr-05	(115.84)	
24-Apr-05	-	
25-Apr-05	(182.91)	
26-Apr-05	(85.01)	
27-Apr-05	(5,477.61)	
28-Apr-05	(16,808.45)	
29-Apr-05	(728.19)	
30-Apr-05	1,842.76	
Totals	(39,617.88)	

The Day-Ahead Congestion Rebate on Carve-Out Grandfathered Agreements Amount represents an Asset Owner's total Operating Day rebate of all congestion charges and credits paid in the Day-Ahead Financial Bilateral Transaction Congestion Amount charge type related to Carve-Out Grandfathered Agreements Transactions. The

rebate amount is calculated hourly by Asset Owner for every valid Carve-Out Grandfathered Agreement Transaction where they are buying and/or selling and then is summed to a daily total. The rebate listed above only goes to the GFA holder.

Since the original congestion amount can be a charge or credit, likewise the rebate can be a charge or credit depending upon the Commercial Nodes that are being settled.

	Day-Ahead Losses Rebate on Carve-Out Grandfathered Agreements (\$)	
01-Apr-05	(59,267.10)	
02-Apr-05	(41,436.46)	
03-Apr-05	(36,742.21)	
04-Apr-05	(84,900.87)	
05-Apr-05	(102,106.17)	
06-Apr-05	(92,571.69)	
07-Apr-05	(79,275.14)	
08-Apr-05	(84,449.65)	
09-Apr-05	(41,675.61)	
10-Apr-05	(35,406.66)	
11-Apr-05	(87,383.05)	
12-Apr-05	(80,839.96)	
13-Apr-05	(83,721.82)	
14-Apr-05	(84,261.29)	
15-Apr-05	(72,117.91)	
16-Apr-05	(49,329.87)	
17-Apr-05	(39,856.23)	
18-Apr-05	(92,348.83)	
19-Apr-05	(93,162.93)	
20-Apr-05	(83,586.95)	
21-Apr-05	(82,847.85)	
22-Apr-05	(79,749.60)	
23-Apr-05	(80,008.32)	
24-Apr-05	(67,819.06)	
25-Apr-05	(96,917.15)	
26-Apr-05	(81,651.22)	
27-Apr-05	(87,231.37)	
28-Apr-05	(92,137.54)	
29-Apr-05	(80,968.20)	
30-Apr-05	(44,097.84)	
Totals	(2,217,868.55)	

The Day-Ahead Losses Rebate on Carve-Out Grandfathered Agreements Amount represents an Asset Owner's total Operating Day rebate of all loss charges and credits paid in the Day-Ahead Financial Bilateral Transaction Loss Amount charge type related to Carve-Out Grandfathered Agreements Transactions. The rebate amount is calculated hourly by Asset Owner for every valid Carve-Out Grandfathered Agreement Transaction where they are buying and/or selling and then is summed to a daily total. Since the original losses amount can be a charge or credit, likewise the rebate can be a charge or credit depending upon the Commercial Nodes that are being settled.

	Day-Ahead Congestion Rebate on Option B Grandfatered Agreements	
	(\$)	
01-Apr-05	-	
02-Apr-05	(1,269.30)	
03-Apr-05	(2.02)	
04-Apr-05	4.96	
05-Apr-05	(952.01)	
06-Apr-05	(45,302.13)	
07-Apr-05	(13,112.81)	
08-Apr-05	(35,117.35)	
09-Apr-05	(653.80)	
10-Apr-05	(963.92)	
11-Apr-05	(8,712.66)	
12-Apr-05	(14,425.67)	
13-Apr-05	(77,793.52)	
14-Apr-05	(13,808.96)	
15-Apr-05	(14,034.31)	
16-Apr-05	(1,471.01)	
17-Apr-05	(118.07)	
18-Apr-05	(36,951.63)	
19-Apr-05	(10,699.45)	
20-Apr-05	(18,837.43)	
21-Apr-05	(32,477.45)	
22-Apr-05	(2,053.29)	
23-Apr-05	254.06	
24-Apr-05	-	
25-Apr-05	(314.23)	
26-Apr-05	(248.87)	
27-Apr-05	(11,203.41)	
28-Apr-05	(74,446.85)	
29-Apr-05	44.40	
30-Apr-05	80.97	
Totals	(414,585.76)	

The Day-Ahead Congestion Rebate on Option B Grandfathered Agreements Amount represents an Asset Owner's total Operating Day rebate of all congestion charges and credits paid in the Day-Ahead Financial Bilateral Transaction Congestion Amount charge type related to Option B Grandfathered Agreements Financial Bilateral Transactions. The rebate amount is calculated hourly by Asset Owner for every valid Option B Grandfathered Agreement Financial Bilateral Transaction where they are buying and/or selling and then is summed to a daily total. Only the GFA holder get the rebate listed above. Since the original congestion amount can be a charge or credit, likewise the rebate can be a charge or credit depending upon the Commercial Nodes that are being settled.

Option B Grandfathered Agreement Financial Bilateral Transaction that did not pass validation in Business Practice Manual for Market Settlements Attachment A Section B.1.1 are not assessed any congestion charges and credits and as such are not assessed any rebates in this charge type.

	Day-Ahead Loss Rebate on Option B Grandfathered Agreements	
	(\$)	
01-Apr-05	(23,354.04)	
02-Apr-05	(18,263.70)	
03-Apr-05	(14,993.40)	
04-Apr-05	(31,162.61)	
05-Apr-05	(37,680.72)	
06-Apr-05	(31,484.85)	
07-Apr-05	(26,021.22)	
08-Apr-05	(28,167.87)	
09-Apr-05	(16,189.35)	
10-Apr-05	(12,076.66)	
11-Apr-05	(33,830.62)	
12-Apr-05	(28,347.93)	
13-Apr-05	(28,534.34)	
14-Apr-05	(29,753.02)	
15-Apr-05	(24,229.76)	
16-Apr-05	(21,927.24)	
17-Apr-05	(16,910.44)	
18-Apr-05	(25,854.10)	
19-Apr-05	(26,847.34)	
20-Apr-05	(23,154.53)	
21-Apr-05	(23,139.74)	
22-Apr-05	(43,252.08)	
23-Apr-05	(23,765.66)	
24-Apr-05	(11,817.46)	
25-Apr-05	(23,784.05)	
26-Apr-05	(21,237.00)	
27-Apr-05	(21,927.95)	
28-Apr-05	(23,156.29)	
29-Apr-05	(22,315.34)	
30-Apr-05	(10,133.71)	
Totals	(723,313.02)	

The Day-Ahead Congestion Rebate on Option B Grandfathered Agreements Amount represents an Asset Owner's total Operating Day rebate of all congestion charges and credits paid in the Day-Ahead Financial Bilateral Transaction Congestion Amount charge type related to Option B Grandfathered Agreements Financial Bilateral Transactions. The rebate amount is calculated hourly by Asset Owner for every valid Option B Grandfathered Agreement Financial Bilateral Transaction where they are buying and/or selling and then is summed to a daily total. Since the original congestion amount can be a charge or credit, likewise the rebate can be a charge or credit depending upon the Commercial Nodes that are being settled.

Option B Grandfathered Agreement Financial Bilateral Transaction that did not pass validation in Business Practice Manual for Market Settlements Attachment A Section B.1.1 are not assessed any congestion charges and credits and as such are not assessed any rebates in this charge type.

	Day-Ahead RSG Distribution Amount (\$)	
01-Apr-05	31,510.85	
02-Apr-05	35,727.88	
03-Apr-05	-	
04-Apr-05	76,637.27	
05-Apr-05	35,776.45	
06-Apr-05	280,136.57	
07-Apr-05	201,660.04	
08-Apr-05	8,236.35	
09-Apr-05	4,562.77	
10-Apr-05	152,650.81	
11-Apr-05	17,013.96	
12-Apr-05	1,188.26	
13-Apr-05	12,386.54	
14-Apr-05	30,305.75	
15-Apr-05	75,972.09	
16-Apr-05	6,148.79	
17-Apr-05	199,298.24	
18-Apr-05	134,488.19	
19-Apr-05	70,278.43	
20-Apr-05	276,003.07	
21-Apr-05	162,631.56	
22-Apr-05	154,954.38	
23-Apr-05	55,826.06	
24-Apr-05	299,896.15	
25-Apr-05	77,716.65	
26-Apr-05	48,496.32	
27-Apr-05	81,608.72	
28-Apr-05	115,653.73	
29-Apr-05	26,471.96	
30-Apr-05	5,114.81	
Totals	2,678,352.65*	

Generation Resources that are committed by the Midwest ISO and scheduled in the Day-Ahead Energy Market are guaranteed cost recovery of their start-up costs, no load costs, and energy offer. Startup, no load, and energy offer

are collectively referred to as production costs. On an hourly basis, the Day-Ahead Real-Time System (DART) determines whether a generation Resource has met the eligibility requirements to have its production costs guaranteed and what those production costs consist of from the asset's Day-Ahead submitted offer. The Day-Ahead settlement calculation compares whether the asset's energy value for all the eligible hours for the Operating Day exceeds the production costs for those same hours. If the total daily energy value is less than the total daily production cost amount, the difference is credited to the Asset Owner as a Day-Ahead Revenue Sufficiency Guarantee Make Whole Payment Amount.

The Day-Ahead Revenue Sufficiency Guarantee Make Whole Payment Amount is summed for each hour for all Asset Owners and is funded through the Day-Ahead Revenue Sufficiency Guarantee Distribution Amount. The distribution amount is charged to each Asset Owner in proportion to its daily total Day-Ahead withdrawal volume compared to the total Midwest ISO Day-Ahead withdrawal volume. The Day-Ahead withdrawal volume includes: cleared Day-Ahead fixed demand bids and price sensitive demand bids, cleared virtual demand bids, and cleared Day-Ahead export Physical Bilateral Transactions.

*The result is rounded based on the Midwest ISO Market Settlements rounding methodology in the Business Practice Manual for Market Settlements Section 2.5

Financial Transmission Rights Hourly Detail for the Month

	FTR Hourly Allocation Amount	
01-Apr-05	-	
02-Apr-05	(22,876.83)	
03-Apr-05	(21,962.20)	
04-Apr-05	(729.05)	
05-Apr-05	(37,368.39)	
06-Apr-05	(440,149.33)	
07-Apr-05	(479,398.09)	
08-Apr-05	(553,501.10)	
09-Apr-05	(207,299.89)	
10-Apr-05	(15,863.83)	
11-Apr-05	(49,433.29)	
12-Apr-05	(358,339.60)	
13-Apr-05	(610,440.51)	
14-Apr-05	(71,092.41)	
15-Apr-05	(131,871.11)	
16-Apr-05	(62,180.30)	
17-Apr-05	(392.32)	
18-Apr-05	(554,245.35)	
19-Apr-05	(239,045.12)	
20-Apr-05	(384,070.27)	
21-Apr-05	(338,345.99)	
22-Apr-05	(33,752.48)	
23-Apr-05	(15,775.67)	
24-Apr-05	(839.00)	
25-Apr-05	(9,721.38)	
26-Apr-05	(48,024.00)	
27-Apr-05	(182,936.59)	
28-Apr-05	(1,448,022.05)	
29-Apr-05	15,104.71	
30-Apr-05	(53,256.77)	
Totals	(6,355,828.21)	

Market Settlement of Financial Transmission Rights (FTR) Hourly Allocation Amount is calculated for each FTR and summed into a daily total per Asset Owner. The FTR is a financial instrument that entitles the holder to receive compensation, or possible pay charge depending on the type of FTR, for congestion along an energy flow path. This instrument can be used to help hedge Day-Ahead congestion costs.

FTRs can be owned by entities at the Asset Owner level and are categorized as:

- An obligation or option
- Point-to-Point or Flowgate Right (FGR)
- On-Peak or Off-Peak type
- Counterflow or Non-Counterflow
- Asset Owner held or Midwest ISO held

An obligation type of FTR pays Asset Owners when the energy flow path is from a lower cost congestion area to a higher cost congestion area, but it also requires Asset Owners to pay congestion charges when the flow path is from a higher cost congestion area to a lower cost congestion area. An option type of FTR pays Asset Owner when the energy flow path is from a lower cost congestion area to a higher cost congestion area, but never charges the Asset Owners when congestion occurs in the opposite direction.

A point-to-point FTR determines congestion based on two Commercial Nodes. A flowgate right FTR determines congestion based on pre-determine flow path constrained point on the system. Flowgate Right FTRs can only be the option type and cannot be the obligation type.

An On-Peak type FTR only applies during the hours ending from 0700 hours through 2200 Eastern Standard Time (no regard for Daylight Savings) Monday through Friday excepting New Year's, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day or if the holiday occurs on a Sunday, the Monday immediately following the holiday.

A Counter Flow FTR is a unique type of Point-to-Point FTR that can be awarded to Asset Owners. Any Point-to-Point FTRs can be identified as a Counter Flow FTR. Counter Flow FTRs provide network counter Flow when a generation asset is operating. As such, Counter Flow FTRs are only eligible for revenue allocations when the generator associated with the Counter Flow FTR is not in an outage at the time the Day-Ahead Market is cleared.

During the settlement of the Asset Owner Counter Flow FTRs, Market Settlements determines whether the generation asset at the FTR source Commercial Node was in an outage for the Operating Day and hour being settled. If the generation asset was determined to be in an outage, Market Settlements during revenue allocations shall adjust the Counter Flow FTR profile volume for the hour to zero. Market Settlements does not prorate the FTR profile volume or validate that the generation asset is producing sufficient generation to provide the necessary network counter flow.

An Asset Owner held FTR is eligible for funding through the hourly, monthly, and yearly revenue allocation process. The Midwest ISO will hold FTRs for Option B Grandfathered Agreements and for Carve-Out Grandfathered Agreements. Midwest ISO held FTRs are only funded with the hourly revenue allocation process with shortfalls never being eligible for funding through the monthly and yearly revenue allocation processes. Midwest ISO held FTRs can only be of the option type and are used as the primary instrument to fund the Day-Ahead Rebate of Congestion on Grandfathered Agreements Amount for Day-Ahead Grandfathered Agreement Financial Bilateral Transactions. For Asset Owners with Grandfathered Agreements who have chosen the Midwest ISO approved tariff Section 38.8.3.b. (Option B), the Midwest ISO issues and holds FTRs for funding the

congestion rebate. All the Midwest ISO held FTRs are used to collectively fund all the Day-Ahead Rebate of Congestion on Grandfathered Agreements Amounts paid to Asset Owners. Any funding shortfall is collected through the Real-Time Grandfathered Agreement Congestion Rebate Distribution Amount.

The FTR settlement dollar revenue allocation process (i.e., payments to FTR holders from Midwest ISO) occurs for an FTR in three processes:

Hourly revenue allocation process (FTR_HR_ALC) - The hourly revenue allocation process determines the amount of congestion dollars available in a single hour and then allocates those dollars to holders of FTRs for the same hour. For each Asset Owner and Midwest ISO held FTR, Market Settlements calculates the hourly target revenue allocation value based on the Day-Ahead Energy Market. The hourly revenue allocation target is the amount of credit that an FTR is paid if there is sufficient congestion dollars available. When there is sufficient congestion dollars available to pay an FTR with its full credit, it is referred to as being a fully funded FTR. If less congestion dollars are collected in an hour than is needed to pay all FTR holders their target value, then all FTR holders are paid on a prorated basis for that hour. The difference between an Asset Owner's target revenue allocation and the actual credit paid is referred to as shortfall. When Asset Owners are not fully funded by the hourly available congestion dollars, Asset Owners are eligible to receive additional revenue allocations to cover their shortfall in the monthly and/or the yearly revenue allocations. For example, if \$10,000 is collected in congestion for an hour, but total FTRs are owed \$20,000, then each FTR holder is only credited 50% of what they are owed during that hour. The hourly FTR revenue allocation process is performed each time an Operating Day is settled whether it is a normally scheduled settlement or if it is an additional non-standard settlement. A non-standard settlement is defined as a settlement that is not 7, 14, 55, or 105 days after the Operating Day.

The Day-Ahead hourly FTR revenue allocation process is funded from:

- The hourly positive sum of (grouping A):
 - Total Hourly Congestion Collections from the Day-Ahead Financial Bilateral Transaction Congestion Amount, plus
 - Total Hourly Congestion Collections from all Day-Ahead energy schedules, plus
 - Total Hourly Congestion Collections from all Obligation FTRs.
- Plus the following (grouping B):
 - Hourly Day-Ahead Joint Operating Agreement (JOA) Excess Funds
 - Hourly Day-Ahead Revenue Inadequacy Excess Funds
- Less the following (grouping C):
 - ⇒ Hourly Day-Ahead Joint Operating Agreement (JOA) Shortfall
 - ⇒ Hourly Day-Ahead Revenue Inadequacy Shortfall

Whenever the sum of grouping A is negative, this shortfall rolls over to the Day-Ahead Congestion Fund to be netted out during the monthly FTR revenue allocation process. The FTR hourly allocation process only occurs when there is positive funds available for an hour; this occurs after grouping C is subtracted from groups A and B. Hourly FTR funding can still occur if the sum of grouping A is negative provided the net of grouping C from grouping B is positive. At the conclusion of the hourly FTR funding, all unallocated Day-Ahead congestion funds roll into the Monthly FTR revenue allocation process.

The hourly FTR revenue allocation fund cannot be reduce below zero by either Day-Ahead JOA Shortfall or by Day-Ahead Revenue Inadequacy Shortfall.

Real Time Hourly Detail for the Month

	Real-Time Distribution on Losses Amount (\$)	
01-Apr-05	(300,590.44)	
02-Apr-05	(1,110,266.44)	
03-Apr-05	(1,073,253.47)	
04-Apr-05	(1,567,149.03)	
05-Apr-05	(1,830,336.15)	
06-Apr-05	(1,603,435.88)	
07-Apr-05	(1,332,197.09)	
08-Apr-05	(1,354,122.26)	
09-Apr-05	(836,094.01)	
10-Apr-05	(636,219.66)	
11-Apr-05	(1,684,023.99)	
12-Apr-05	(1,535,448.02)	
13-Apr-05	(1,517,613.79)	
14-Apr-05	(1,557,960.08)	
15-Apr-05	(1,208,143.34)	
16-Apr-05	(850,742.05)	
17-Apr-05	(692,054.88)	
18-Apr-05	(1,856,285.68)	
19-Apr-05	(1,853,559.03)	
20-Apr-05	(1,597,760.61)	
21-Apr-05	(1,596,556.50)	
22-Apr-05	(1,416,954.38)	
23-Apr-05	(1,326,682.46)	
24-Apr-05	(1,190,101.12)	
25-Apr-05	(1,957,172.98)	
26-Apr-05	(1,665,404.55)	
27-Apr-05	(1,665,522.79)	
28-Apr-05	(1,601,156.29)	
29-Apr-05	(1,477,977.01)	
30-Apr-05	(950,355.05)	
Totals	(40,845,139.03)	

Real-Time Distribution of Losses Amount is the charge type that distributes surplus collected losses to Load Zone Asset Owners. This charge type is calculated hourly. The charge type has three main calculation routines: 1) the determination of the marginal loss surplus to be distributed, 2) the allocation of the surplus into loss pools, and 3) the distribution of the loss pools to each Asset Owner within each loss pool.

On an hourly basis, MISO calculates the Marginal Loss Surplus as the sum of:

- The total Real-Time Over-Collected Losses, plus
- The total Day-Ahead Losses Rebate on Option B Grandfathered Agreements Financial Bilateral Transactions Amount, plus
- The total Day-Ahead Losses Rebate on Carve-Out Grandfathered Agreements Charge Type
 Amount, plus
- The total Real-Time Losses Rebate on Carve-Out Grandfathered Agreements Charge Type Amount.

Real-Time Over-Collected Losses is a dollar value calculated by the Day-Ahead and Real-Time System (DART) every 5 minutes as the Real-Time Market is cleared and is aggregated to an hourly value.

The Midwest ISO regional transmission authority area is divided into Loss Pools. A Loss Pool is defined as a collection of Balancing Authorities for the purpose of distributing loss surplus. The relationships between Balancing Authorities and Loss Pools may vary over time and are maintained historically by Operating Days.

The total marginal losses surplus is distributed among Loss Pools based upon a loss (cost) distribution factor. This weighted distribution factor is determined for each Loss Pool by the estimated cost of marginal losses in the pool and by the average marginal cost of losses of any imported energy. Estimated Marginal Losses can either be positive or negative based upon the reference bus that set the Marginal Loss Component for the Hour.

Within each Loss Pool, the hourly total marginal loss surplus is distributed based upon Load consumed within the Loss Pool. All Load supplied by Option B Grandfathered Agreement Financial Bilateral Transactions and Carve-Out Grandfathered Agreement Transactions are excluded from surplus loss distributions since their losses are rebated in other Charge Types.

	Real-Time Congestion Rebate on Carve-Out Grandfathered Agreements (\$)	
01-Apr-05	(3,302.78)	
02-Apr-05	(3,597.47)	
03-Apr-05	(636.24)	
04-Apr-05	(50.99)	
05-Apr-05	(910.52)	
06-Apr-05	(149.00)	
07-Apr-05	19.50	
08-Apr-05	(6.89)	
09-Apr-05	5.57	
10-Apr-05	(39.25)	
11-Apr-05	1,716.52	
12-Apr-05	4,233.49	
13-Apr-05	82.18	
14-Apr-05	80.28	
15-Apr-05	72.45	
16-Apr-05	(612.94)	
17-Apr-05	0.27	
18-Apr-05	(137.50)	
19-Apr-05	(1,070.34)	
20-Apr-05	(18.38)	
21-Apr-05	(0.59)	
22-Apr-05		
23-Apr-05	(58.08)	
24-Apr-05	(22.68)	
25-Apr-05	(137.21)	
26-Apr-05	(146.24)	
27-Apr-05	(1,378.27)	
28-Apr-05	54.62	
29-Apr-05	••	
30-Apr-05	(8.92)	
Totals	(6,019.41)	

The Real-Time Congestion Rebate on Carve-Out Grandfathered Agreements Amount represents an Asset Owner's total Operating Day rebate of all congestion charges and credits paid in the Real-Time Financial Bilateral Transaction Congestion Amount Charge Type to Carve-Out Grandfathered Agreements Transactions. The rebate amount is calculated hourly by Asset Owner for every valid Carve-Out Grandfathered Agreement Transaction where they are buying and/or selling and then is summed to a daily total. Since the original congestion amount can be a

charge or credit, likewise the rebate can be a charge or credit depending upon the Commercial Nodes that are being settled.

	Real-Time Loss Rebate on Carve-Out Grandfathered Agreements (\$)	
01-Apr-05	(4,599.37)	
02-Apr-05	(8,408.19)	
03-Apr-05	(369.19)	
04-Apr-05	(2.97)	
05-Apr-05	(470.87)	
06-Apr-05	495.29	
07-Apr-05	(158.54)	
08-Apr-05	27.84	
09-Apr-05	31.68	
10-Apr-05	376.68	
11-Apr-05	(2,808.55)	
12-Apr-05	(1,007.80)	
13-Apr-05	10.91	
14-Apr-05	(6.93)	
15-Apr-05	(18.44)	
16-Apr-05	568.87	
17-Apr-05	14.28	
18-Apr-05	(95.25)	
19-Apr-05	(460.76)	
20-Apr-05	(58.22)	
21-Apr-05	(51.22)	
22-Apr-05	(118.31)	
23-Apr-05	(97.78)	
24-Apr-05	20.66	
25-Apr-05	44.57	
26-Apr-05	(221.29)	
27-Apr-05	351.90	
28-Apr-05	(8.96)	
29-Apr-05	(150.21)	
30-Apr-05	(68.71)	
Totals	(17,238.88)	

The Real-Time Losses Rebate on Carve-Out Grandfathered Agreements Amount represents an Asset Owner's total Operating Day rebate of all loss charges and credits paid in the Real-Time Financial Bilateral Transaction Loss Amount charge type related to Carve-Out Grandfathered Agreements Transactions. The rebate amount is calculated hourly by Asset Owner for every valid Carve-Out Grandfathered Agreement Transaction where they are buying

and/or selling and then is summed to a daily total. Since the original losses amount can be a charge or credit, likewise the rebate can be a charge or credit depending upon the Commercial Nodes that are being settled.

For additional information on Carve-Out Grandfathered Agreement l Transactions, please refer to Business Practice Manual for Market Settlements Section 2.16.

Real-Time Miscellaneous Amount.....\$0.00

The Real-Time Miscellaneous Amount charge type is a mechanism that allows the Midwest ISO to issue charges and/or credits based on specific requirements to either one Asset Owner or to the entire market. The Midwest ISO follows a strict internal approved procedure process prior to initiating this charge. This charge type can be used for charges or credits ordered by the Independent Market Monitor. This specific charge type facilitates the following charges and/or credits:

- A charge or credit applied to a single Asset Owner (referred to as Method A)
- A charge or credit applied to a single Asset Owner with the opposite charge or credit spread to
 all other Asset Owners based on the Operating Day's: 1) load ratio share (LRS), 2) market ratio share
 (MRS), or 3) Financial Transmission Rights ratio share (FRS) (referred to as Method B).
- A charge or credit applied to all Asset Owners based on an Operating Day's: 1) load ratio share (LRS), 2) market ratio share (MRS), or 3) Financial Transmission Rights ratio share (FRS) (referred to as Method C).

The Real-Time Energy Market Settlement Statement specifically lists each miscellaneous charge along with:

- A reference identifier
- The reason for the charge
- Whether the charge or credit is for a single Asset Owner or the entire market
- The ratio share being applied if applicable
- The amount of the charge or credit.

The following must be known in order to apply a single miscellaneous transaction:

- Determine the total transaction miscellaneous charge or credit amount.
- Determine whether the full amount is for a single Asset Owner (Method A or B) or is to be allocated to the entire market (Method C).

- If in step 2 the full amount is for a single Asset Owner, determine whether all other Asset Owners are responsible for paying for or collecting the amount that is given to the single Asset Owner. (Method B when all other Asset Owners are responsible, Method A if they are not)
- If either Method C was chosen in step 2 or if Method B was chosen in step 3, determine which distribution ratio share allocation method must be used (LRS, MRS, or FRS)

Load Ratio Share (LRS) is equal to an Asset Owner's total hourly load divided by the total hourly load for all the Midwest ISO.

Market Ratio Share (MRS) is equal to an Asset Owner's total hourly Day-Ahead and Real-Time Administration Volume divided by the total hourly Day-Ahead and Real-Time Administration Volume for all the Midwest ISO.

Financial Transmission Rights Ratio Share (FRS) is equal to an Asset Owner's total hourly Financial Transmission Rights Profile Volume divided by the total hourly Asset Owner Financial Transmission Rights Profile Volume for all the Midwest ISO.

	Real-Time Net Inadvertent Distribution Amount (\$)		
01-Apr-05	(508,212.90)		
02-Apr-05	(507,107.64)		
03-Apr-05	40,604.87		
04-Apr-05	(556,520.00)		
05-Apr-05	(262.65)		
06-Apr-05	(108,874.21)		
07-Apr-05	94,583.31		
08-Apr-05	(178,642.52)		
09-Apr-05	91,917.41		
10-Apr-05	(57,285.99)		
11-Apr-05	80,616.98		
12-Apr-05	78,117.15		
13-Apr-05	(1,368,911.43)		
14-Apr-05	264,298.97		
15-Apr-05	17,022.12		
16-Apr-05	(2,354.77)		
17-Apr-05	138,899.55		
18-Apr-05	345,864.55		
19-Apr-05	(231,856.72)		
20-Apr-05	632,585.49		
21-Apr-05	(257,376.50)		
22-Apr-05	297,575.93		
23-Apr-05	104,706.41		
24-Apr-05	(28,381.37)		
25-Apr-05	(102,820.15)		
26-Apr-05	479,354.79		
27-Apr-05	(205,031.93)		
28-Apr-05	(402,639.24)		
29-Apr-05	(37,317.25)		
30-Apr-05	176,893.71		
Totals	(1,710,554.03)		

Real-Time Net Inadvertent Distribution is the daily allocation to Asset Owners of any energy dollars that result from the Midwest ISO Balancing Authority Net Inadvertent for an Operating Day. On an hourly basis each Balancing Authority is tasked with balancing their energy generation supply, their load and their Net Scheduled Interchange. The difference between the Net Scheduled Interchange and the Net Actual Interchange is Net Inadvertent. The hourly energy cost of the Net Inadvertent is calculated by averaging the LMP from all generators in a Control Area times the volume of the inadvertent for that same hour. The dollar impact for all hours in an Operating Day for all

the Midwest ISO Balancing Authorities is summed and is allocated to Asset Owners based on the Asset Owner's participation in the Day-Ahead and Real-Time Energy Markets for the Operating Day.

	Real-Time Revenue Neutrality Uplift Amount (\$)	
01-Apr-05	(110,688.51)	
02-Apr-05	685,796.30	
03-Apr-05	233,684.76	
04-Apr-05	669,661.63	
05-Apr-05	726,086.41	
06-Apr-05	727,972.96	
07-Apr-05	538,398.79	
08-Apr-05	728,835.18	
09-Apr-05	264,376.88	
10-Apr-05	165,801.81	
11-Apr-05	606,505.19	
12-Apr-05	1,060,582.12	
13-Apr-05	586,425.78	
14-Apr-05	913,611.31	
15-Apr-05	683,290.77	
16-Apr-05	496,854.53	
17-Apr-05	249,824.77	
18-Apr-05	666,580.26	
19-Apr-05	1,383,307.11	
20-Apr-05	552,067.61	
21-Apr-05	1,407,226.46	
22-Apr-05	655,008.73	
23-Apr-05	873,010.18	
24-Apr-05	627,533.80	
25-Apr-05	1,094,772.47	
26-Apr-05	1,337,045.67	
27-Apr-05	862,830.79	
28-Apr-05	1,508,453.39	
29-Apr-05	1,043,453.26	
30-Apr-05	326,594.51	
Totals	21,564,904.92	

Real-Time Revenue Neutrality Uplift Amount is a charge type set up as a revenue distribution balancing mechanism for charges and credits that have no other distribution method to Asset Owners. On an hourly basis, all charges and credits that have no other distribution method are summed, and the subsequent total charge or credit for the hour is distributed to Asset Owners based on their Load Ratio Share (LRS).

An Asset Owner's Load Ratio Share is determined by:

- Summing the volumes of the Asset Owner's assets that are consuming energy (acting as load) for an hour plus the sum of all Real-Time Physical Bilateral Transactions volume where the Asset Owner is buying the transaction volume for export out of the Midwest ISO (these are wheel out schedules from the Midwest ISO and do not include wheel through schedules), and
- Dividing the result by the sum of all Asset Owner assets that are consuming energy during the same hour plus the sum of all Real-Time Physical Bilateral Transactions volume where Asset Owner's are buying the transaction volume for export out of the Midwest ISO (these are wheel out schedules from the Midwest ISO and do not include wheel through schedules).

The following charges and/or credits are distributed through this amount:

- Uninstructed Deviation Charge Distribution Uplift
- Revenue Inadequacy Uplift
- Joint Operating Agreement (JOA) Uplift
- Option B Grandfathered Agreement Financial Bilateral Transaction Congestion Rebate
 Distribution Amount Uplift
- Carve-Out Grandfathered Agreement Congestion Rebate Distribution Amount Uplift
- Real-Time Revenue Sufficiency Guarantee Make Whole Payments Second Pass Distribution
 Uplift

	Real-Time Revenue Sufficiency Guarantee First Pass Distribution Amount (\$)	
01-Apr-05	40,239.02	
02-Apr-05	46,136.47	
03-Apr-05	40,653.03	
04-Apr-05	1,580,790.45	
05-Apr-05	147,623.99	
06-Apr-05	470,947.51	
07-Apr-05	251,541.67	
08-Apr-05	441.82	
09-Apr-05	99,850.11	
10-Apr-05	106,035.23	
11-Apr-05	1,759,331.62	
12-Apr-05	1,121,249.10	
13-Apr-05	1,659,805.47	
14-Apr-05	1,002,380.94	
15-Apr-05	834,790.87	
16-Apr-05	355,109.68	
17-Apr-05	483,510.24	
18-Apr-05	934,126.18	
19-Apr-05	845,722.55	
20-Apr-05	1,131,293.63	
21-Apr-05	609,083.32	
22-Apr-05	2,026,369.25	
23-Apr-05	1,027,945.63	
24-Apr-05	725,545.14	
25-Apr-05	1,080,558.84	
26-Apr-05	587,862.42	
27-Apr-05	1,058,087.91	
28-Apr-05	779,625.79	
29-Apr-05	517,219.96	
30-Apr-05	776,945.46	
Totals	22,100,823.30	

Real-Time Revenue Sufficiency Guarantee Make Whole Payment Amount credited to Asset Owners is funded hourly by the Midwest ISO primarily using the Real-Time Revenue Sufficiency Guarantee First Pass Distribution Amount

	Uninstructed Deviation		
	Amount		
	(\$)		
01-Apr-05	137,121.44		
02-Apr-05	191,998.73		
03-Apr-05	128,821.28		
04-Apr-05	172,848.80		
05-Apr-05	126,675.75		
06-Apr-05	87,625.05		
07-Apr-05	125,814.32		
08-Apr-05	70,133.42		
09-Apr-05	59,506.71		
10-Apr-05	110,797.05		
11-Apr-05	211,833.85		
12-Apr-05	95,080.62		
13-Apr-05	83,655.11		
14-Apr-05	65,539.39		
15-Apr-05	81,559.41		
16-Apr-05	56,590.95		
17-Apr-05	29,938.66		
18-Apr-05	60,161.51		
19-Apr-05	99,859.66		
20-Apr-05	48,596.52		
21-Apr-05	67,203.01		
22-Apr-05	91,910.48		
23-Apr-05	64,822.13		
24-Apr-05	36,605.23		
25-Apr-05	83,151.78		
26-Apr-05	65,236.31		
27-Apr-05	70,193.88		
28-Apr-05	53,204.93		
29-Apr-05	47,945.00		
30-Apr-05	34,215.93		
Totals	2,658,646.91		

Real-Time Uninstructed Deviation Amount is charged to non-exempted generators that do not follow the Midwest ISO Real-Time Energy Market dispatch signal. In the Real-Time Energy Market, the Midwest ISO sends a dispatch signal to each generator identifying the expected megawatt output that it is expected to be generating in the next five minutes. Over the course of the hour these dispatch signals are integrated into an hourly dispatch set point used for settlement. The generator's actual metered performance is measured against the dispatch set point and when the deviation exceeds the tariff specified threshold, then uninstructed deviation charges are incurred by the Asset Owner for that hour. There is an upper and lower threshold.

- The upper threshold limit is referred to as the "Uninstructed Deviation Up Tolerance". This limit is set hourly by summing the set point, regulation up bandwidth, and an up tolerance volume. The up tolerance volume is equal to 10% of the set point volume bounded by an up maximum and up minimum volume limit. Up uninstructed deviation charges are incurred on volumes that exceed the upper threshold limit.
- The lower threshold limit is referred to as the "Uninstructed Deviation Down Tolerance". This limit is set hourly by subtracting from the set point volume both the regulation down bandwidth and the down tolerance volume. The down tolerance volume is equal to 10% of the set point volume bounded by a down maximum and down minimum volume limit. Down uninstructed deviation charges are incurred on volumes that exceed the lower threshold limit, but is limited so that the Asset Owner always receives at least a minimum percentage of LMP for each megawatt generated.

Generation assets that have been designated as an Intermittent Resource by the Midwest ISO are exempt from incurring Uninstructed Deviation charges. The Midwest ISO may certify a generation asset as an Intermittent Resource for any period of time (years, months, days, and hours). Whenever a generation asset has been certified as an Intermittent Resource, the Uninstructed Deviation Exempt Flag for those applicable hours is set to "Y" for the asset.

The Midwest ISO at times may determine that conditions may present themselves whereby it would not be appropriate to charge any generation asset the hour Real-Time Uninstructed Deviation Amounts. These type of conditions could be the result of significant electric grid anomalies such as disturbances from major storms or blackouts, or when the availability of Real-Time Generation Instruction data is questionable. Whenever this type of condition occurs and the Midwest ISO deems it appropriate not to charge Real-Time Uninstructed Deviation Amounts, the Midwest ISO shall set the Uninstructed Deviation Exempt Flag for those applicable hours to "Y" for all generation assets, and shall notify the Market Participants via a posting to the Market Settlements web page.

Only generation assets can incur Real-Time Uninstructed Deviation Amount charges. As such, demand Response Resource assets are exempted from uninstructed deviation charges.

FERC FILINGS FOR THE EMT As of 4/19/05

I. Compliance Filings

5/2/05 The Midwest ISO and PJM to submit additional changes to the JOA in compliance with the March 3, 2005 Order. 1

5/15/05 The Midwest ISO to make a compliance filing to address uplift methodology for Carved-Out GFAs.

5/16/05 The Midwest ISO to make a compliance filing to:

- File existing contracts and/or identify such contracts already on file with FERC, on which flowgate capacity is based per Section 5.1.10 of the Seams Operating Agreement ("SOA") with MAPP;² and
- Delete reference to "MHEX" in SOA's Section 5.1.10, and treat MHEX as a third-party flowgate.³

5/16/05: The Midwest ISO to make a compliance filing to:

- Inform the FERC on Midwest ISO's progress in establishing communication links with Control Areas' back-up facilities.⁴
- Either: (1) indicate FERC orders to which certain 12/22/04 tariff revisions were directed; or (2) re-file such tariff sheets.⁵
- Either revise or define the phrase "First Revised" that the 12/22/04 compliance filing proposed to substitute for "original" in EMT Sheets Nos. 467 and 563.6

March 3, 2005 Order on JOA, 110 FERC ¶ 61,226 (2005) in ER04-375-017, et al.

March 16, 2005 Order on SOA, 110 FERC ¶ 61,290 at P 48 (2005). This 5/16/05 entry is described as a single compliance filing addressing two compliance items because Ordering Para. (B) refers only to a "compliance filing" (i.e., singular).

March 16 Order on readiness and clean-up, 110 FERC ¶ 61,289 at P 37.

March 16 Order on readiness and clean-up, 110 FERC ¶ 61,289 at P 48.

March 16 Order on readiness and clean-up, 110 FERC ¶ 61,289 at P 50. The March 16 Order on readiness and clean-up does not specify any compliance period for the "First Revised" item, but FERC may have had in mind the 30-day compliance period for the other compliance items.

March 16, 2005 Order on SOA, 110 FERC ¶ 61,290 at P 46 (2005). The March 16 Order on the SOA does not specify a compliance period for the MHEX-related Midwest ISO-MAPPCOR compliance item. However, FERC seems to deem it covered by the 60-day compliance period in Ordering Para. (B), because the latter also mentions MAPPCOR, while the only other 60-day compliance item (at P 48) pertains to the Midwest ISO alone.

5/17/05

The Midwest ISO and PJM to submit a compliance filing concerning a cross border proposal for allocating to customers in each RTO the cost of new transmission facilities that are built in one RTO but provide benefits to customers in the other RTO.7

5/31/05 Station Power (Schedule 20) compliance filing.

II. Reporting

The Midwest ISO and PJM to file 60-day status report regarding JOA implementation 5/2/05 and market progress and Joint and Common Market implementation.8

The Midwest ISO and MAPP to make informational filing every 45 days from March 16, 5/2/05 2005 Order on Seams Operating Agreement ("SOA") to provide updates on negotiations regarding four sets of issues raised by Wisconsin Parties in ER04-691-023, et al.9

III. Pending Complaints

Initial response to Quest Energy's complaint alleging that the Midwest ISO improperly 4/20/05 modified Quest Energy's Load Zone Commercial Price Node in the Consumers Energy control area (Docket No. EL05-86).

Initial response to Alliant's complaint seeking relief for failure to allocate certain FTRs to 4/28/05 Alliant in the initial FTR allocation (Docket No. EL05-82).

IV. Recently Made EMT Filings

Filed FTR Second Allocation Issues (60-Days prior to 6/6/05): 4/8/05

- Requested expedited (30 days) effective date
- Collapse of Tier II
- Conversion of counterflow within 30 days of allocation
- Based upon 4/5/05 Markets Subcommittee meeting: (1) add definition of "historical capacity factor" for FTR calculations which excludes outages based upon scheduled or planned outages of 30 days or more; and (2) change default allocations of FTRs for point-to-point transmission service where parties are unable to agree upon the source for slice of system allocations to make the default value the generator's load zone.
- 3/15/05 proposed FTR clean ups

Midwest ISO's Energy Markets and shall not be relied upon for such purpose. Any party relying on the data provided in this report is doing so at its own risk. The Midwest ISO shall not be liable for any consequences or damages to any party relying on the data provided herein.

¹⁰⁹ FERC ¶ 61,168 at P 60 (2004) in ER05-6-000, EL04-135-000, EL02-111, et al., and EL03-212, et al.

¹⁰⁶ FERC \P 61,251 (2004), 108 FERC \P 61,143 (2004) and 100 FERC \P 61,137 (2002) 8 in ER04-375 and EL02-65.

March 16, 2005 Order, 110 FERC ¶ 61,290 at P 35 (2005) ("March 16 Order on SOA"). The data provided in this report is provided for informational purposes only and does not contain information related to the settlement of the

- Sheet 624: make consistent with language re other tiers
- Sheet 628: correct inadvertent omission
- Sheet 630B: clarify
- Sheet 647: make consistent with prior Order and compliance filings
- Sheet 650: correct typo
- Sheets 654, 656, 668 and 670: correct typo to "\$/MW"
- Sheet 662: remove language tied to March 1, 2005 start date
- Sheet 630: check definition of eligible FTRs for ECCH "(i.e., those that have source points within either the Control Area or the state)"
- Sheet 638: check Redirect Option (Section 43.5.4.a) re: (1) whether it is related to allocation; (2) what is "system purchase agreement"; (3) inconsistency with BPM or existing systems or processes; (4) "like PJM" redirect issues

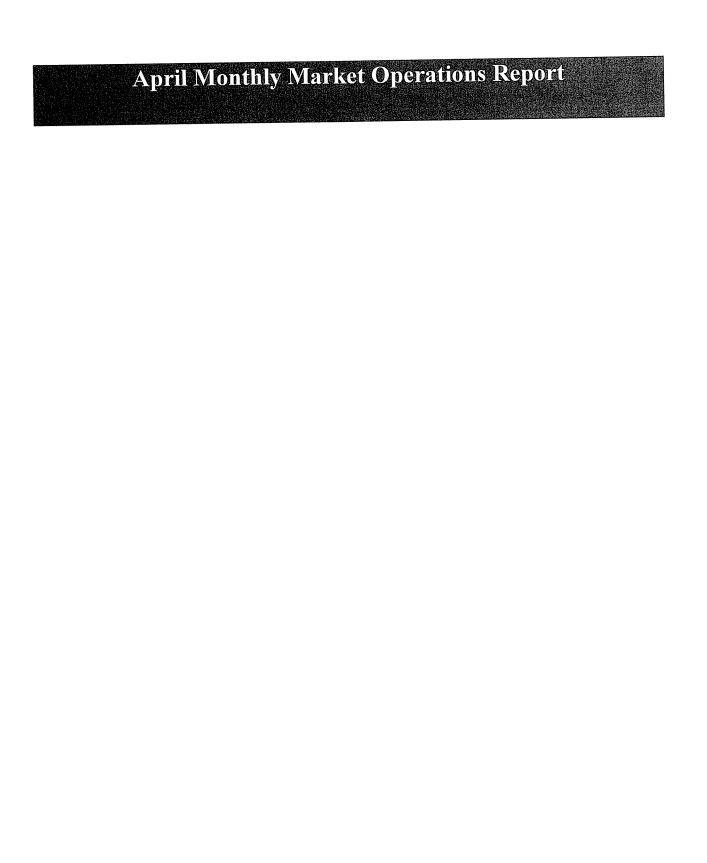
Changed credit exposure timeline in Attachment L (Credit Policy). 4/12/05

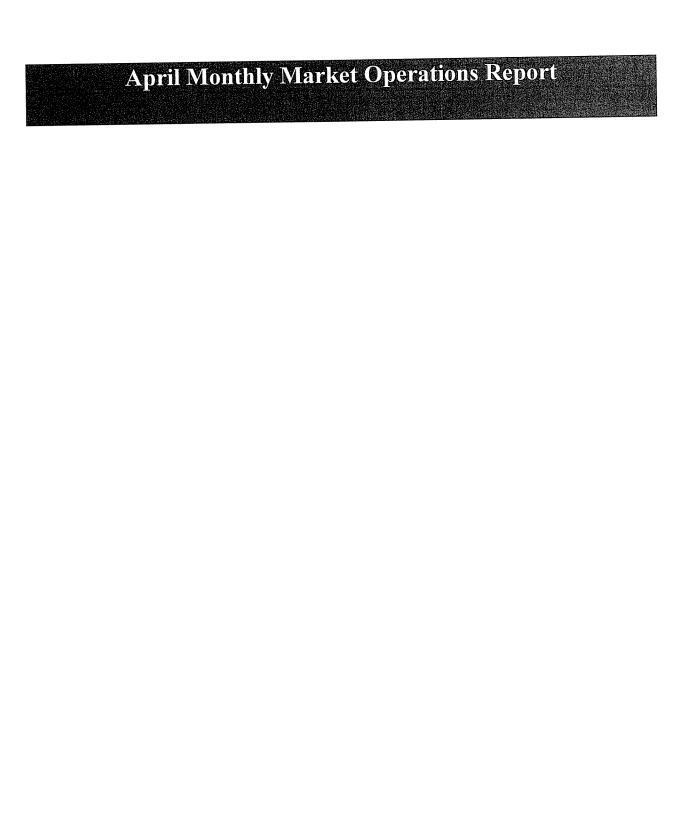
V. LONGER-TERM REQUIREMENTS

- On or about June 28, 2005: Progress report should lay out a schedule facilitating October 31, 2005 filing of specific plan and timeline for continuing development of a joint and common market.10
- October 31, 2005: File concrete plan and timeline for joint and common market, including: (1) each specific element of such a market; (2) tasks; (3) impediments; (4) necessary changes to tariffs, rules, systems and procedures to accomplish enhanced market portal and other elements to commence common market operations, and ultimately a joint and common market.11

¹⁰ March 3, 2005 Order on JOA at P 75.

¹¹ March 3, 2005 Order on JOA at P 76.





June 16, 2005

If you have any comments, questions or suggestions on this report, please contact either:

Christine Harrell

317-249-5815 or Charrell@MidwestISO.org

Or

Paul Gribik

317-249-5146 or Pgribik@MidwestISO.org

May Day Ahead Summary - Dollars Cleared

Load Information

	May 2005 (\$)		
Fixed Bid Cleared Load	\$ 1	,410,420,002.34	
Price Sensitive Bids Cleared Load	\$	52,463,725.46	
Virtual Bid Cleared at Interface	\$	34,314,511.42	
Virtual Bid Cleared at Cinergy Hub	\$	36,594,730.82	
Virtual Bid Cleared at Illinois Hub	\$	1,720,333.82	
Virtual Bid Cleared at Michigan Hub	\$	13,940,742.56	
Virtual Bid Cleared at Minnesota Hub	\$	2,320,385.42	
Virtual Bids Cleared Load	\$	10,931,435.89	
Virtual Demand Bids Cleared - Generation	\$	69,157,889.97	
Total Cleared Load	\$ -	1,631,863,757.69	

Supply

		May 2005 (\$)
Virtual Offer Cleared at Michigan Hub	\$	7,957,970.19
Virtual Offer Cleared at Minnesota Hub	\$	990,747.38
Virtual Offer Cleared at Illinois Hub	\$	2,406,293.04
Virtual Offer Cleared at Cinergy Hub	\$	26,145,317.39
Virtual Offer Cleared at Interface	\$	7,425,613.99
Virtual Offer Cleared Load	\$	25,282,234.23
Virtual Supply Offer Cleared Generation	\$	77,934,358.39
Resource Offers Cleared	<u>\$</u>	1,377,506,080.64
Total Cleared Supply	\$ *	1,525,648,615.26

May Pricing Summary Pricing Information - Hubs

Cinergy Hub

	Daily	Daily	Daily Maximum
Date	Minimum Price	Average Price	Price
05/01/05	15.10	22.83	44.67
05/02/05	19.38	30.61	51.87
05/03/05	22.94	36.69	61.76
05/04/05	22.18	34.34	54.87
05/05/05	17.96	37.21	59.79
05/06/05	16.37	44.01	86.99
05/07/05	14.73	28.73	48.05
05/08/05	5.19	26.07	77.96
05/09/05	0.00	40.11	97.87
05/10/05	15.11	46.62	107.14
05/11/05	15.83	39.31	91.75
05/12/05	11.73	29.03	80.20
05/13/05	16.45	36.70	75.27
05/14/05	13.19	25.62	46.13
05/15/05	6.38	18.97	28.18
05/16/05	1.86	25.92	49.12
05/17/05	-6.08	8.23	41.34
05/18/05	11.25	34.54	70.85
05/19/05	13.81	43.27	97.57
05/20/05	16.27	31.56	52.38
05/21/05	13.72	24.19	40.94
05/22/05	8.92	24.64	54.03
05/23/05	13.66	41.02	73.60
05/24/05	11.44	28.73	57.08
05/25/05	14.62	29.05	
05/26/05	14.53	27.49	
05/27/05	14.30		
05/28/05	12.85		
05/29/05	5.95	20.58	
05/30/05			
05/31/05	12.71	37.40	82.11

Illinois Hub

Date	Daily Minimum Price	Daily Average Price	Daily Maximum Price
05/01/05	14.59	21.93	43.19
05/02/05	18.65	30.02	54.09
05/03/05	22.21	35.89	62.28
05/04/05	21.68	33.44	52.91
05/05/05	17.42	36.36	56.44
05/06/05	15.90	42.99	85.24
05/07/05	14.13	27.49	46.06
05/08/05	5.03	23.43	73.51
05/09/05	0.00	37.58	94.89
05/10/05	14.76	46.00	106.04
05/11/05	15.30	33.83	84.61
05/12/05	11.37	29.16	85.50
05/13/05	15.97	36.00	74.44
05/14/05	12.75	25.06	45.03
05/15/05	6.30	18.55	27.60
05/16/05	1.71	25.44	48.44
05/17/05	-6.95	8.01	40.53
05/18/05	11.02	37.34	81.76
05/19/05	13.45	44.83	99.04
05/20/05	15.75	31.94	59.41
05/21/05	13.38	23.58	39.85
05/22/05	8.61	23.90	52.92
05/23/05	12.75	40.05	72.55
05/24/05	10.14	27.88	55.97
05/25/05	13.28	27.61	63.21
05/26/05	14.10	26.71	46.56
05/27/05	13.90	25.59	43.63
05/28/05	12.53	21.67	
05/29/05	578	19.91	28.04
05/30/0	5 11.38	19.94	
05/31/0	5 12.34	36.66	80.46

May Pricing Summary

Pricing Information - Hubs

Michigan Hub

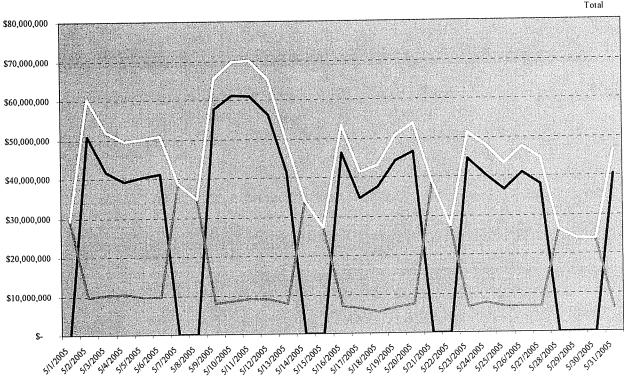
	Daily Minimum	Daily Average	Daily Maximum
Date	Price	Price	Price
05/01/05	15.64	23.79	46.95
05/02/05	19.81	32.05	55.29
05/03/05	23.50	38.32	64.99
05/04/05	23.05	35.95	57.25
05/05/05	18.67	39.70	62.60
05/06/05	17.39	46.96	93.07
05/07/05	15.28	29.94	50.77
05/08/05	5.25	25.37	79.97
05/09/05	0.00	41.23	103.00
05/10/05	16.10	49.98	114.83
05/11/05	16.40	36.28	90.54
05/12/05	12.21	31.02	90.33
05/13/05	17.41	38.61	78.90
05/14/05	13.13	26.92	49.28
05/15/05	8.01	20.04	29.81
05/16/05	-0.37	27.29	52.23
05/17/05	-10.46	8.47	44.31
05/18/05	11.80	41.28	91.12
05/19/05	14.93	47.90	105.21
05/20/05	17.25	34.92	66.23
05/21/05	14.29	25.41	43.24
05/22/05	8.80	25.28	56.92
05/23/05	13.67	43.15	
05/24/0	9.39	30.74	62.22
05/25/0	5 13.22	31.14	70.01
05/26/0	5 15.45	29.94	51.15
05/27/0	5 15.11	28.0	48.28
05/28/0	5 13.43	3 23.46	44.06
05/29/0	5 6.20	21.50	30.61
05/30/0	5 12.20	21.6	47.08
05/31/0	5 13.3	39.8	4 87.71

Minnesota Hub

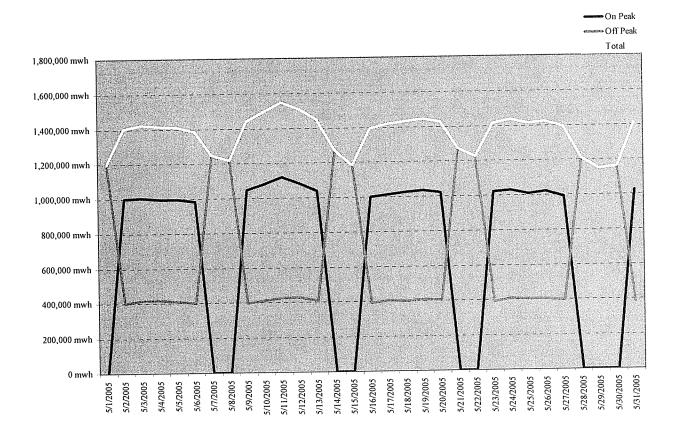
Date	Daily Minimum Price	Daily Average Price	Daily Maximum Price
05/01/05	6.51	20.42	43.65
05/02/05	5.97	25.15	51.00
05/03/05	10.77	22.30	54.33
05/04/05	10.91	25.77	48.91
05/05/05	6.26	23.57	42.04
05/06/05	13.47	40.04	88.48
05/07/05	9.68	21.42	35.64
05/08/05	1.67	21.95	73.66
05/09/05	0.00	40.03	100.14
05/10/05	11.70	45.46	111.09
05/11/05	14.56	33.95	83.11
05/12/05	10.06	29.04	87.53
05/13/05	-5.91	32.05	74.04
05/14/05	-15.73	15.08	42.29
05/15/05	-5.44	16.42	26.11
05/16/05	-39.11	17.13	47.75
05/17/05	-66.92	3.67	39.53
05/18/05	1.15	34.97	79.29
05/19/05	4.53	42.40	97.58
05/20/05	7.24	29.88	59.58
05/21/05	-10.91	19.03	37.93
05/22/05	-25.37	15.00	50.49
05/23/05	8.33	36.57	73.01
05/24/05	1.15	25.22	55.69
05/25/05	-40.7	23.12	2 66.98
05/26/05	5 4.68	3 24.79	47.56
05/27/0	12.02	2 25.0	44.36
05/28/0	5 12.02	2 21.1	3 40.51
05/29/0	5 5.3	2 19.2	0 27.26
05/30/0	5 10.7	4 19.6	6 43.61
05/31/0	5 11.4	0 38.9	0 88.47

Fixed Bid Cleared Dollars at Load Zones

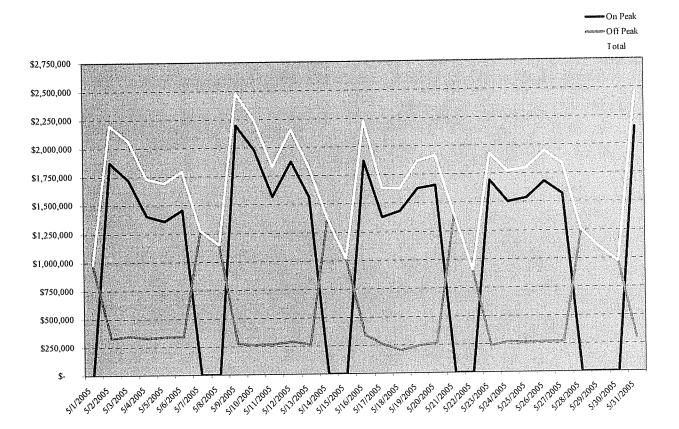




Fixed Bid Cleared Energy at Load Zones



Price Sensitive Cleared Dollars at Load Zones



June 16, 2005

If you have any comments, questions or suggestions on this report, please contact either:

Christine Harrell

317-249-5815 or Charrell@MidwestISO.org

Or

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317-249-5146 or Pgribik@MidwestISO.org

May Day Ahead Summary - Dollars Cleared

Load Information

		May 2005 (\$)
Fixed Bid Cleared Load	\$ 1	1,410,420,002.34
Price Sensitive Bids Cleared Load	\$	52,463,725.46
Virtual Bid Cleared at Interface	\$	34,314,511.42
Virtual Bid Cleared at Cinergy Hub	\$	36,594,730.82
Virtual Bid Cleared at Illinois Hub	\$	1,720,333.82
Virtual Bid Cleared at Michigan Hub	\$	13,940,742.56
Virtual Bid Cleared at Minnesota Hub	\$	2,320,385.42
Virtual Bids Cleared Load	\$	10,931,435.89
Virtual Demand Bids Cleared - Generation	\$	69,157,889.97
Total Cleared Load	\$	1,631,863,757.69

Supply

		May 2005 (\$)
Virtual Offer Cleared at Michigan Hub	\$	7,957,970.19
Virtual Offer Cleared at Minnesota Hub	\$	990,747.38
Virtual Offer Cleared at Illinois Hub	\$	2,406,293.04
Virtual Offer Cleared at Cinergy Hub	\$	26,145,317.39
Virtual Offer Cleared at Interface	\$	7,425,613.99
Virtual Offer Cleared Load	\$	25,282,234.23
Virtual Supply Offer Cleared Generation	\$	77,934,358.39
Resource Offers Cleared	\$_	1,377,506,080.64
Total Cleared Supply	\$	1,525,648,615.26

May Day Ahead Summary - MW Cleared

Load Information	<u>MW May 2005</u>
Fixed Bid Cleared MW at Load	42,243,690.90
Price Sensitive Bids Cleared MW at Load	1,419,839.10
Virtual Bid Cleared MW at Interface	1,156,530.40
Virtual Bid Cleared MW at Cinergy Hub	1,177,405.00
Virtual Bid Cleared MW at Illinois Hub	46,983.00
Virtual Bid Cleared MW at Michigan Hub	363,721.00
Virtual Bid Cleared MW at Minnesota Hub	89,883.00
Virtual Bid Cleared MW at Load Zones	365,205.30
Virtual Bid Cleared at Generator CPNodes	2,227,070.00
Total Load	49,090,327.70

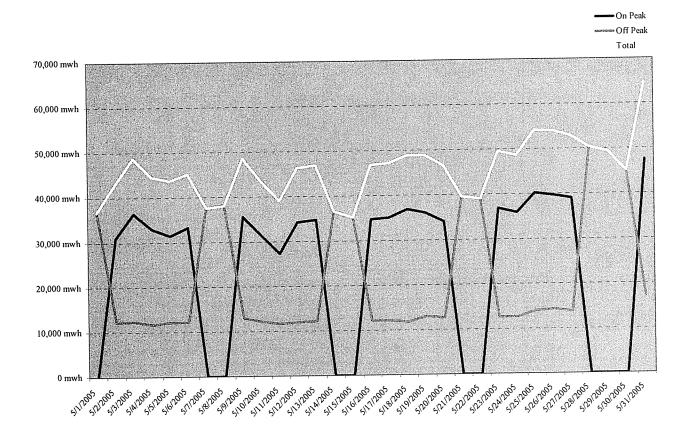
Supply

	<u>MW May 2005</u>
Virtual Offer Cleared MW at Interface	239,225.30
Virtual Offer Cleared MW at Cinergy Hub	784,731.00
Virtual Offer Cleared MW at Illinois Hub	63,031.00
Virtual Offer Cleared MW at Michigan Hub	209,856.00
Virtual Offer Cleared MW at Minnesota Hub	31,537.00
Virtual Offer Cleared MW at Load Zones	801,948.10
Virtual Offer Cleared MW at Generation CPNodes	2,417,166.00
Total Resource Offers Cleared	43,255,991.40
Total Supply	47,803,485.80

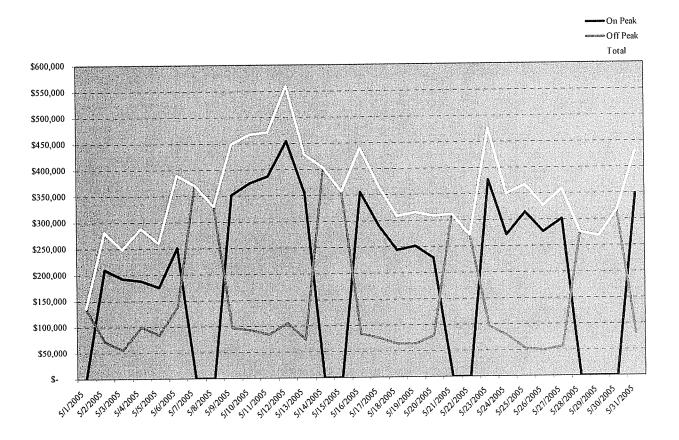
Month to Month Comparison

Load Information	Fixed Bid Cleared Load Price Sensitive Bids Cleared Load Virtual Bid Cleared at Interface	-	May 2005 (\$) ,410,420,002.34 52,463,725.46 34,314,511.42		<u>April 2005 (\$)</u> ,735,696,920.82 55,395,679.71 38,101,900.89	Percent Change 0.81 0.95 0.90
	Virtual Bid Cleared at Cinergy Hub	\$	36,594,730.82	\$	39,209,736.68	0.93
	Virtual Bid Cleared at Illinois Hub	\$	1,720,333.82	\$	782,116.90	2.20 1.47
	Virtual Bid Cleared at Michigan Hub	\$	13,940,742.56	\$ \$	9,512,335.91 2,072,727.08	1.12
	Virtual Bid Cleared at Minnesota Hub	\$ \$	2,320,385.42 10,931,435.89	Ф \$	8,008,401.06	1.36
	Virtual Bids Cleared Load Virtual Demand Bids Cleared - Generation	Ф 2	69,157,889.97	\$	38,033,240.49	1.82
	Total Cleared Load	\$ 1	,631,863,757.69	· · · · · · · · · · · · · · · · · · ·	1,926,813,059.54	0.85
Supply			May 2005 (\$)	_	April 2005 (\$)	
	Virtual Offer Cleared at Michigan Hub	\$	7,957,970.19	\$	10,344,414.24	0.77
	Virtual Offer Cleared at Minnesota Hub	\$	990,747.38	\$	1,211,474.70	0.82
	Virtual Offer Cleared at Illinois Hub	\$	2,406,293.04	\$	3,523,181.52	0.68
	Virtual Offer Cleared at Cinergy Hub	\$	26,145,317.39	\$	31,226,519.28	0.84
	Virtual Offer Cleared at Interface	\$	7,425,613.99	\$	8,702,490.22	0.85 1.10
	Virtual Offer Cleared Load	\$	25,282,234.23	\$	23,059,784.73	1.10
	Virtual Supply Offer Cleared Generation	\$	77,934,358.39	\$	59,337,342.59 1,603,694,614.34	0.86
	Resource Offers Cleared Total Cleared Supply		1,377,506,080.64 1, 525,648,615.26	-	1,741,099,821.62	0.88

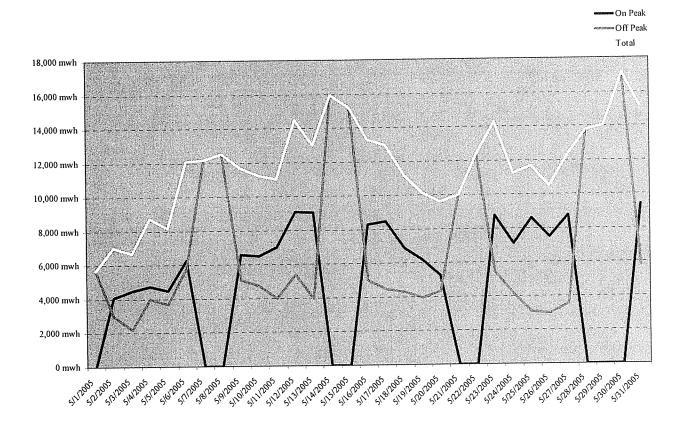
Price Sensitive Cleared Energy at Load Zones



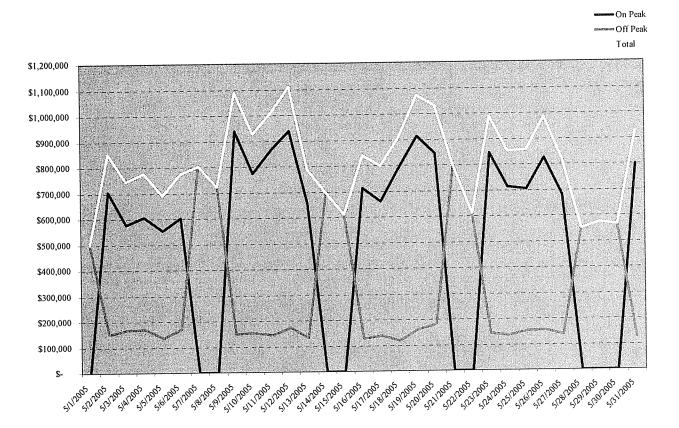
Vitrual Bid Cleared Dollars at Load Zones



Virtual Bid Cleared Energy at Load Zones

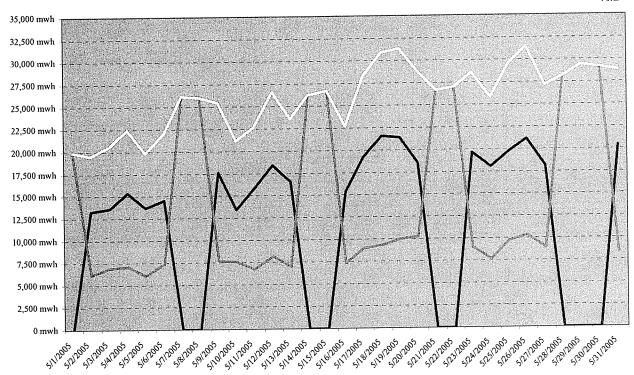


Virtual Offer Cleared Dollars at Load Zones

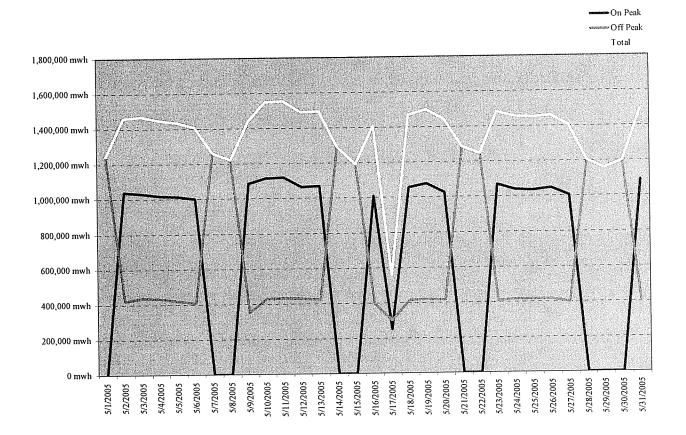


Virtual Offer Cleared Energy at Load Zones





Daily Total of all Cleared Bids at Load Zones



Darcont

Month to Month Comparison

			Percent
Load Information	MW May 2005	MW April 2005	Change
Fixed Bid Cleared MW at Load	42,243,690.90	39,219,902.00	1.08
Price Sensitive Bids Cleared MW at Load	1,419,839.10	1,157,537.80	1.23
Virtual Bid Cleared MW at Interface	1,156,530.40	1,023,448.50	1.13
Virtual Bid Cleared MW at Cinergy Hub	1,177,405.00	970,000.40	1.21
Virtual Bid Cleared MW at Illinois Hub	46,983.00	17,092.00	2.75
Virtual Bid Cleared MW at Michigan Hub	363,721.00	227,234.40	1.60
Virtual Bid Cleared MW at Minnesota Hub	89,883.00	55,102.40	1.63
Virtual Bid Cleared MW at Load Zones	365,205.30	183,246.10	1.99
Virtual Bid Cleared at Generator CPNodes	2,227,070.00	1,064,445.56	2.09
Total Load	49,090,327.70	43,918,009.16	1.12
Supply			
Cuppiy	MW May 2005	MW April 2005	
Virtual Offer Cleared MW at Interface	239,225.30	200,864.80	1.19
Virtual Offer Cleared MW at Cinergy Hub	784,731.00	693,331.10	1.13
Virtual Offer Cleared MW at Illinois Hub	63,031.00	67,897.00	0.93
Virtual Offer Cleared MW at Michigan Hub	209,856.00	210,537.00	1.00
Virtual Offer Cleared MW at Minnesota Hub	31,537.00	24,682.80	1.28
Virtual Offer Cleared MW at Load Zones	801,948.10	531,179.70	1.51
Virtual Offer Cleared MW at Generation CPNodes	2,417,166.00	1,374,565.30	1.76
Total Resource Offers Cleared	43,255,991.40	40,952,217.10	1.06
Total Supply	47,803,485.80	44,055,274.80	1.09

May Pricing Summary Pricing Information - Hubs

Cinergy Hub

	Daily	Daily	Daily
	Minimum	Average	Maximum
Date	Price	Price	Price
05/01/05	15.10	22.83	44.67
05/02/05	19.38	30.61	51.87
05/03/05	22.94	36.69	61.76
05/04/05	22.18	34.34	54.87
05/05/05	17.96	37.21	59.79
05/06/05	16.37	44.01	86.99
05/07/05	14.73	28.73	48.05
05/08/05	5.19	26.07	77.96
05/09/05	0.00	40.11	97.87
05/10/05	15.11	46.62	107.14
05/11/05	15.83	39.31	91.75
05/12/05	11.73	29.03	
05/13/05	16.45	36.70	75.27
05/14/05	13.19	25.62	46.13
05/15/05	6.38	18.97	28.18
05/16/05	1.86	25.92	49.12
05/17/05	-6.08	8.23	41.34
05/18/05	11.25	34.54	70.85
05/19/05	13.81	43.27	97.57
05/20/05	16.27	31.56	52.38
05/21/05	13.72	24.19	40.94
05/22/05	8.92	24.64	54.03
05/23/05	13.66	41.02	73.60
05/24/05	11.44	28.73	57.08
05/25/05	14.62	29.05	64.31
05/26/05	14.53	27.49	47.52
05/27/0	14.30	26.33	44.97
05/28/0	12.85	22.46	42.84
05/29/0	5 5.95	20.58	3 29.07
05/30/0	5 11.65	20.62	
05/31/0	5 12.7	37.40	82.11

Illinois Hub

Date	Daily Minimum Price	Daily Average Price	Daily Maximum Price
05/01/05	14.59	21.93	43.19
05/02/05	18.65	30.02	54.09
05/03/05	22.21	35.89	62.28
05/04/05	21.68	33.44	52.91
05/05/05	17.42	36.36	56.44
05/06/05	15.90	42.99	85.24
05/07/05	14.13	27.49	46.06
05/08/05	5.03	23.43	73.51
05/09/05	0.00	37.58	94.89
05/10/05	14.76	46.00	106.04
05/11/05	15.30	33.83	84.61
05/12/05	11.37	29.16	85.50
05/13/05	15.97	36.00	74.44
05/14/05	12.75	25.06	45.03
05/15/05	6.30	18.55	27.60
05/16/05	1.71	25.44	48.44
05/17/05	-6.95	8.01	40.53
05/18/05	11.02	37.34	81.76
05/19/05	13.45	44.83	99.04
05/20/05	15.75	31.94	59.41
05/21/05	13.38	23.58	39.85
05/22/05	8.61	23.90	52.92
05/23/05	12.75	40.05	72.55
05/24/05	10.14	27.88	55.97
05/25/05	13.28	27.61	63.21
05/26/05	14.10	26.71	46.56
05/27/05	13.90	25.59	43.63
05/28/0	12.53	21.67	40.53
05/29/0	5 5.78	19.9	28.04
05/30/0	5 11.38	19.94	43.00
05/31/0	5 12.34	36.66	80.46

May Pricing Summary

Pricing Information - Hubs

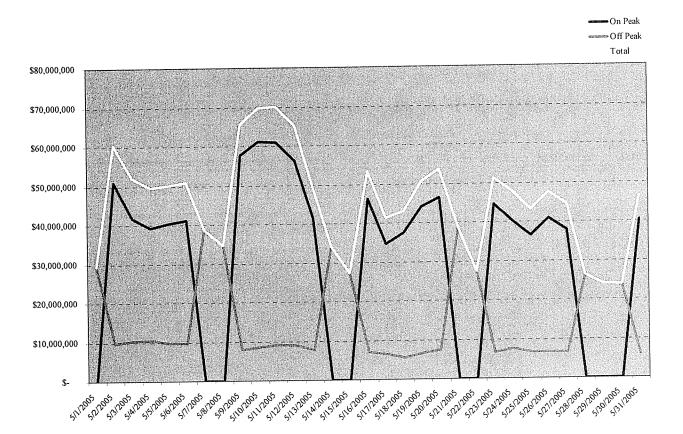
Michigan Hub

	Daily Minimum	Daily Average	Daily Maximum
Date	Price	Price	Price
05/01/05	15.64	23.79	46.95
05/02/05	19.81	32.05	55.29
05/03/05	23.50	38.32	64.99
05/04/05	23.05	35.95	57.25
05/05/05	18.67	39.70	62.60
05/06/05	17.39	46.96	93.07
05/07/05	15.28	29.94	50.77
05/08/05	5.25	25.37	79.97
05/09/05	0.00	41.23	103.00
05/10/05	16.10	49.98	114.83
05/11/05	16.40	36.28	90.54
05/12/05	12.21	31.02	90.33
05/13/05	17.41	38.61	78.90
05/14/05	13.13	26.92	49.28
05/15/05	8.01	20.04	29.81
05/16/05	-0.37	27.29	52.23
05/17/05	-10.46	8.47	44.31
05/18/05	11.80	41.28	91.12
05/19/05	14.93	47.90	105.21
05/20/05	17.25	34.92	66.23
05/21/05	14.29	25.41	43.24
05/22/05	8.80	25.28	56.92
05/23/05	13.67	43.15	78.05
05/24/05	9.39	30.74	62.22
05/25/05	13.22	31.14	70.01
05/26/05	15.45	29.94	51.15
05/27/05	15.11	28.05	48.28
05/28/05	13.43	23.46	44.06
05/29/0	6.20	21.56	30.61
05/30/0	12.20	21.66	47.08
05/31/0	5 13.33	39.84	87.71

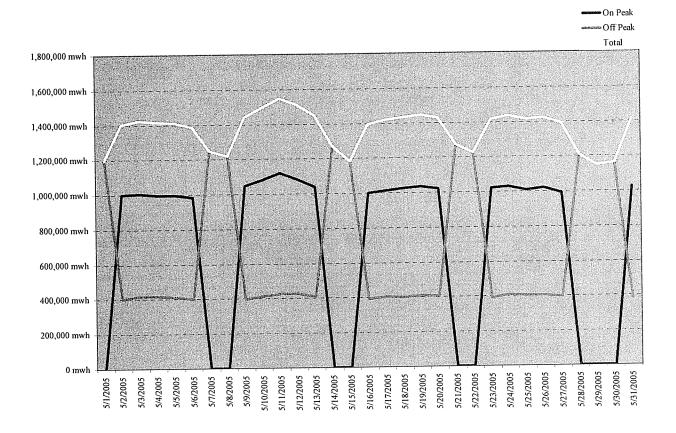
Minnesota Hub

Date	Daily Minimum Price	Daily Average Price	Daily Maximum Price
05/01/05	6.51	20.42	43.65
05/02/05	5.97	25.15	51.00
05/03/05	10.77	22.30	54.33
05/04/05	10.91	25.77	48.91
05/05/05	6.26	23.57	42.04
05/06/05	13.47	40.04	88.48
05/07/05	9.68	21.42	35.64
05/08/05	1.67	21.95	73.66
05/09/05	0.00	40.03	100.14
05/10/05	11.70	45.46	111.09
05/11/05	14.56	33.95	83.11
05/12/05	10.06	29.04	87.53
05/13/05	-5.91	32.05	74.04
05/14/05	-15.73	15.08	42.29
05/15/05	-5.44	16.42	26.11
05/16/05	-39.11	17.13	47.75
05/17/05	-66.92	3.67	39.53
05/18/05	1.15	34.97	79.29
05/19/05	4.53	42.40	97.58
05/20/05	7.24	29.88	
05/21/05	-10.91	19.03	37.93
05/22/05	-25.37	15.00	50.49
05/23/05	8.33	36.57	73.01
05/24/05	1.15	25.22	55.69
05/25/05	-40.71	23.12	
05/26/05	4.68	24.79	47.56
05/27/05	12.02	25.00	44.36
05/28/05	5 12.02	21.10	40.51
05/29/05	5 5.32	19.20	27.26
05/30/0	5 10.74	19.66	43.61
05/31/0	5 11.40	38.9	88.47

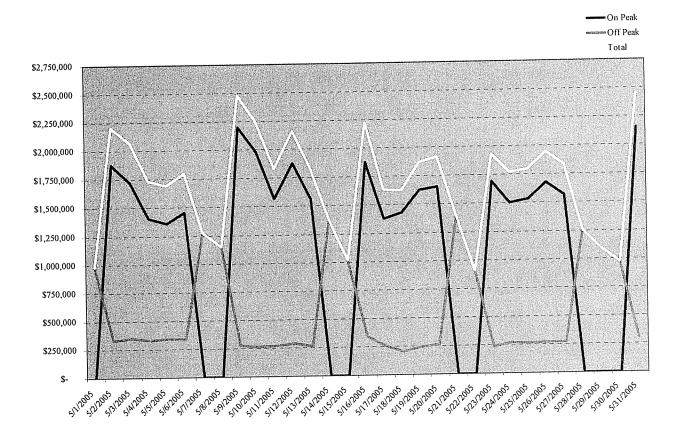
Fixed Bid Cleared Dollars at Load Zones



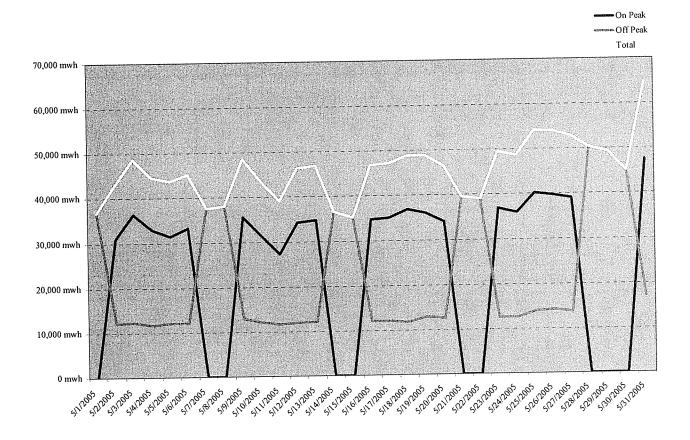
Fixed Bid Cleared Energy at Load Zones



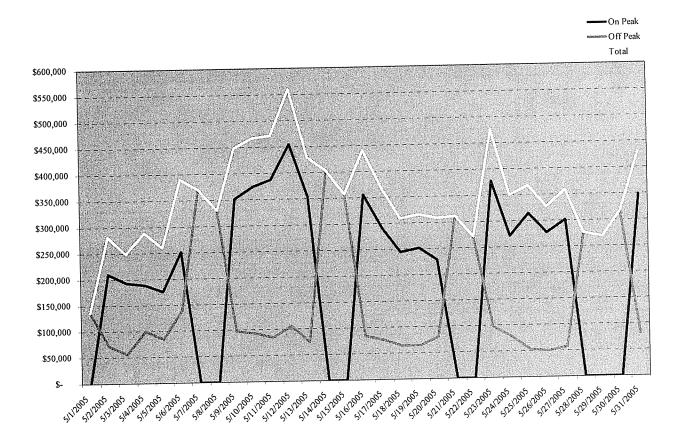
Price Sensitive Cleared Dollars at Load Zones



Price Sensitive Cleared Energy at Load Zones



Vitrual Bid Cleared Dollars at Load Zones



Virtual Bid Cleared Energy at Load Zones

18,000 mwh

16,000 mwh

14,000 mwh

12,000 mwh

10,000 mwh

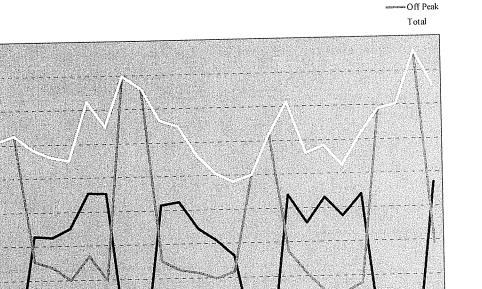
8,000 mwh

6,000 mwh

4,000 mwh

2,000 mwh

0 mwh



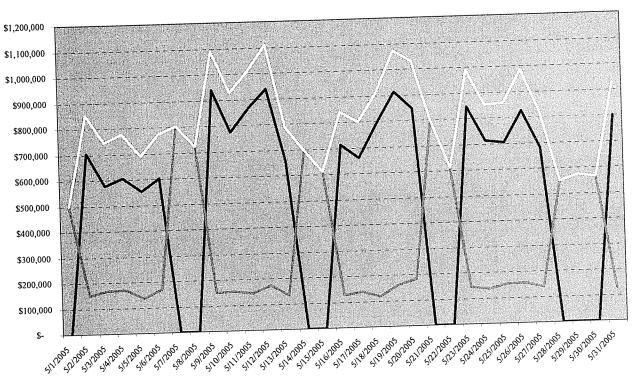
On Peak

The data provided in this report is provided for informational purposes only and does not contain information related to the settlement of the Midwest ISO's Energy Markets and shall not be relied upon for such purpose. Any party relying on the data provided in this report is doing so at its own risk. The Midwest ISO shall not be liable for any consequences or damages to any party relying on the data provided herein.

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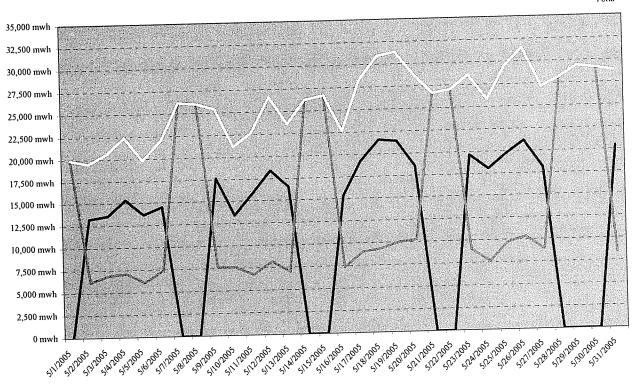
Virtual Offer Cleared Dollars at Load Zones



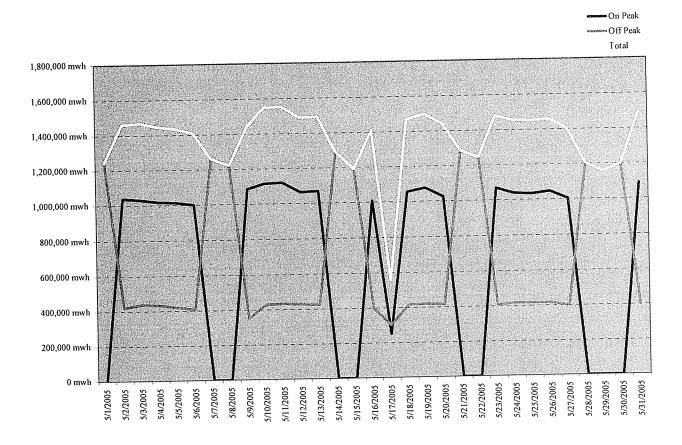


Virtual Offer Cleared Energy at Load Zones

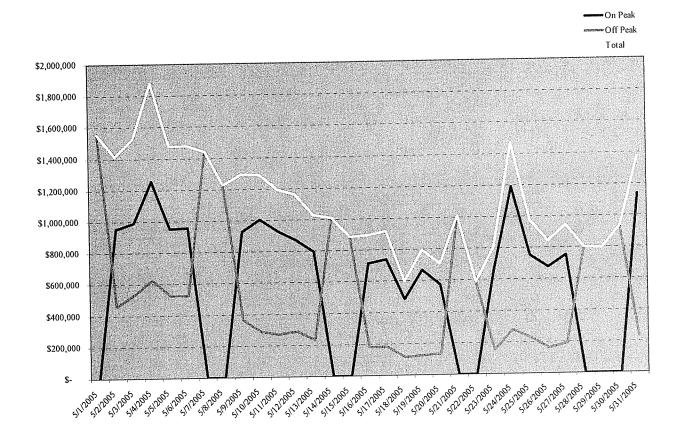




Daily Total of all Cleared Bids at Load Zones

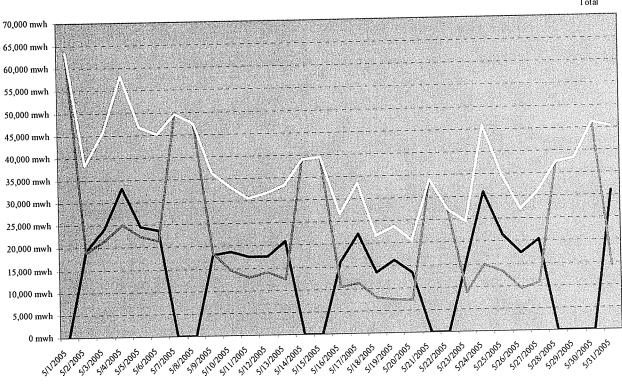


Virtual Bid Cleared Dollars - Interface CPNodes

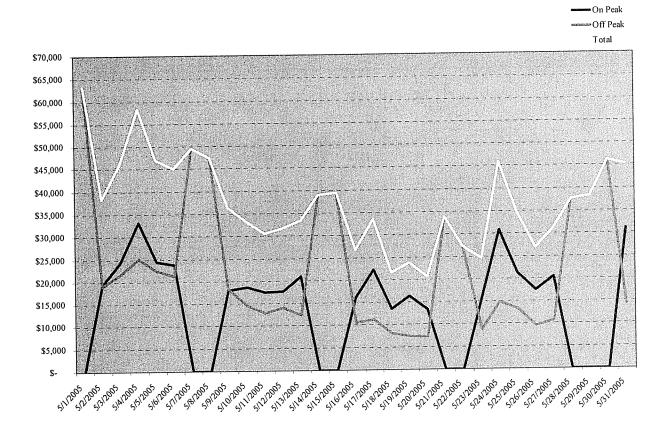


Virtual Bid Cleared Energy - Interface CPNodes

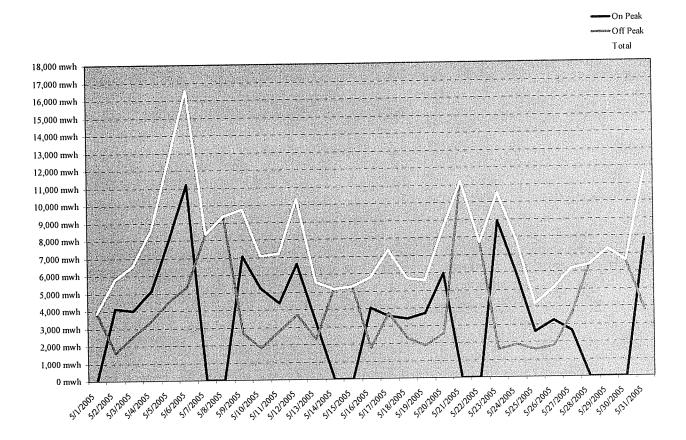




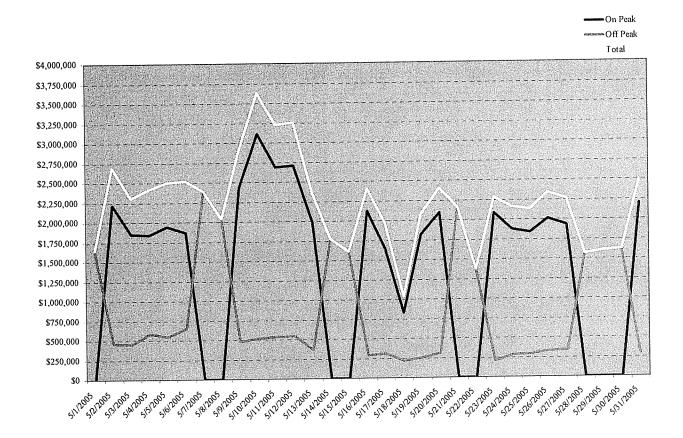
Virtual Offer Cleared Dollars - Interface CPNodes



Virtual Offer Cleared Energy - Interface CPNodes

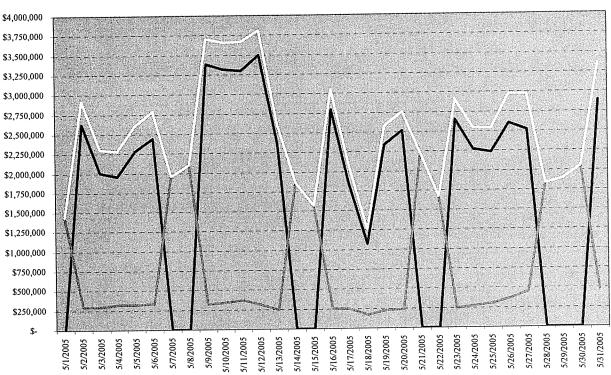


Virtual Supply Offer Cleared Energy at Generator Nodes

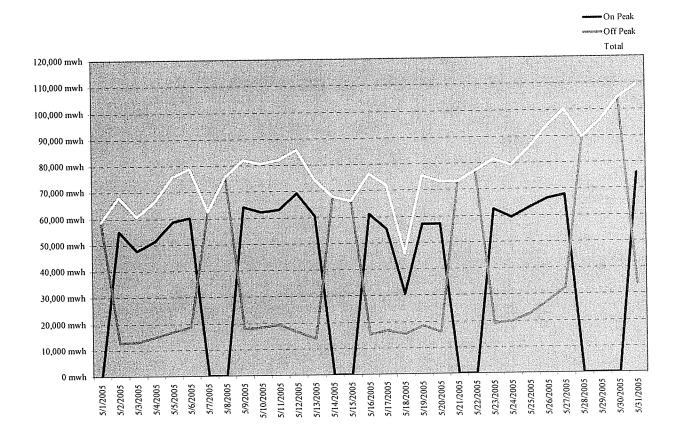


Virtual Supply Offer Cleared Dollars at Generator Nodes

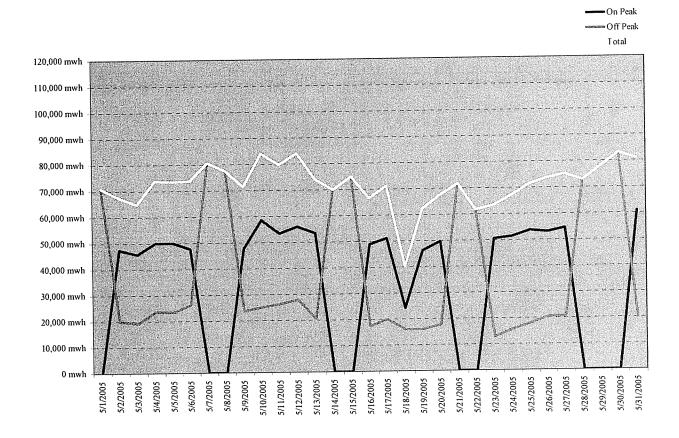




Virtual Supply Offer Cleared Energy at Generator Nodes



Virtual Demand Bids Cleared Energy at Generator Nodes



Day-Ahead Daily MWh for Fixed Bids Submitted*

Date	On Peak	Off Peak	Total
05/01/05	-	1,197,062.00	1,197,062.00
05/02/05	999,041.00	402,317.00	1,401,358.00
05/03/05	1,003,480.00	419,458.00	1,422,938.00
05/04/05	994,789.00	418,858.00	1,413,647.00
05/05/05	997,777.00	411,111.00	1,408,888.00
05/06/05	984,990.00	401,841.00	1,386,831.00
05/07/05		1,250,168.00	1,250,168.00
05/08/05	-	1,219,761.00	1,219,761.00
05/09/05	1,045,688.30	396,073.60	1,441,761.90
05/10/05	1,080,172.20	415,115.90	1,495,288.10
05/11/05	1,119,647.80	429,542.20	1,549,190.00
05/12/05	1,083,733.10	427,425.80	1,511,158.90
05/13/05	1,038,606.20	411,685.30	1,450,291.50
05/14/05	**	1,271,908.50	1,271,908.50
05/15/05	825,110.70	361,247.90	1,186,358.60
05/16/05	999,948.90	392,820.60	1,392,769.50
05/17/05	1,013,619.90	405,300.40	1,418,920.30
05/18/05	1,027,525.50	403,734.40	1,431,259.90
05/19/05	1,035,903.30	408,707.20	1,444,610.50
05/20/05	1,022,761.60	406,782.10	1,429,543.70
05/21/05	-	1,273,135.60	1,273,135.60
05/22/05	-	1,227,293.10	1,227,293.10
05/23/05	1,021,909.00	394,653.00	1,416,562.00
05/24/05	1,028,640.00	409,203.00	1,437,843.00
05/25/05	1,009,457.00	405,301.00	1,414,758.00
05/26/05	1,020,191.00	405,426.00	1,425,617.00
05/27/05	993,917.10	397,887.70	1,391,804.80
05/28/05		1,209,795.40	1,209,795.40
05/29/05		1,149,315.30	1,149,315.30
05/30/05		1,164,446.10	1,164,446.10
05/31/05	1,024,959.90	385,235.30	1,410,195.20
Total	22,371,868.50	19,872,611.40	42,244,479.90
<u> </u>			

^{*} Submitted includes both accepted and not accepted bids.

Day-Ahead Daily MWh for Price Sensitive Bids Submitted*

	O- D1	Off Peak	Total
Date	On Peak		
05/01/05	-	39,277.00	39,277.00
05/02/05	35,646.00	12,976.00	48,622.00
05/03/05	40,131.00	13,268.00	53,399.00
05/04/05	36,247.00	12,702.00	48,949.00
05/05/05	35,139.00	13,216.00	48,355.00
05/06/05	36,987.00	13,245.00	50,232.00
05/07/05	-	41,055.00	41,055.00
05/08/05	=	41,478.00	41,478.00
05/09/05	39,668.60	13,739.40	53,408.00
05/10/05	38,031.10	13,017.50	51,048.60
05/11/05	31,995.90	12,964.50	44,960.40
05/12/05	38,684.40	13,351.90	52,036.30
05/13/05	37,994.00	13,113.50	51,107.50
05/14/05		39,824.60	39,824.60
05/15/05	27,158.30	11,232.50	38,390.80
05/16/05	38,034.60	13,005.30	51,039.90
05/17/05	37,827.40	13,064.50	50,891.90
05/18/05	40,255.70	12,684.90	52,940.60
05/19/05	40,017.50	13,903.90	53,921.40
05/20/05	38,495.20	13,832.10	52,327.30
05/21/05	-	43,162.00	43,162.00
05/22/05	-	41,705.00	41,705.00
05/23/05	40,804.00	13,453.00	54,257.00
05/24/05	40,190.00	13,870.00	54,060.00
05/25/05	43,889.00	14,860.00	58,749.00
05/26/05	43,416.00	15,231.00	58,647.00
05/27/05	41,744.00	14,869.80	56,613.80
05/28/05		53,356.70	53,356.70
05/29/05	_	52,514.60	52,514.60
05/30/05		48,000.10	48,000.10
05/31/05	50,566.80	17,869.90	68,436.70
Total	852,922.50	699,843.70	1,552,766.20
IUIAI	002,022.00	000,0-10110	

^{*} Submitted includes both accepted and not accepted bids.

Day-Ahead Daily MWh for Virtual Bid Submitted

Date	On Peak	Off Peak	Total
5/1/05	0.00	6,413.00	6,413.00
5/2/05	6,982.00	3,906.00	10,888.00
5/3/05	6,337.00	4,290.00	10,627.00
5/4/05	5,412.00	5,350.00	10,762.00
5/5/05	5,454.00	5,034.00	10,488.00
5/6/05	7,347.00	7,076.00	14,423.00
5/7/05	0.00	14,258.00	14,258.00
5/8/05	0.00	14,400.00	14,400.00
5/9/05	8,099.00	5,216.00	13,315.00
5/10/05	8,225.00	4,905.00	13,130.00
5/11/05	8,956.00	4,545.50	13,501.50
5/12/05	11,106.00	5,704.00	16,810.00
5/13/05	10,400.00	4,433.00	14,833.00
5/14/05	0.00	17,422.50	17,422.50
5/15/05	0.00	17,497.00	17,497.00
5/16/05	10,576.50	5,441.00	16,017.50
5/17/05	10,858.50	4,915.00	15,773.50
5/18/05	9,921.50	5,357.00	15,278.50
5/19/05	8,933.50	5,327.50	14,261.00
5/20/05	9,051.00	6,757.50	15,808.50
5/21/05	0.00	18,424.00	18,424.00
5/22/05	0.00	17,380.00	17,380.00
5/23/05	11,702.00	6,048.00	17,750.00
5/24/05	10,722.00	6,020.00	16,742.00
5/25/05	14,467.00	5,393.00	19,860.00
5/26/05	19,425.00	5,797.00	25,222.00
5/27/05	14,956.00	6,210.00	21,166.00
5/28/05	0.00	14,415.50	14,415.50
5/29/05	0.00	14,874.50	14,874.50
5/30/05	11,789.80	5,414.70	17,204.50
5/31/05	13,273.50	5,801.50	19,075.00
Total	223,994.30	254,026.20	478,020.50

^{*} Submitted includes both accepted and not accepted bids.

Day-Ahead Congestion Rebate on Carve-Out Grandfathered Agreements

Day of the Month	For the Month of May (\$)	For the Month of April (\$)	Change from May to April (\$)
1	(8,078.00)	_	(8,078.00)
2	(38,194.98)	(23.68)	(38,171.30)
3	(78,619.01)	(26.00)	(78,593.01)
4	(14,693.46)	(0.60)	(14,692.86)
5	(8,640.35)	1,912.04	(10,552.39)
6	127.76	7,052.04	(6,924.28)
7	(3,386.84)	(591.36)	(2,795.48)
8	2,012.72	(8,115.20)	10,127.92
9	(546.82)	1,632.77	(2,179.59)
10	(11,426.30)	360.52	(11,786.82)
11	1,663.09	(549.38)	2,212.47
12	5,458.97	8,877.95	(3,418.98)
13	195.94	(1,978.29)	2,174.23
14	(669.86)	(1,686.24)	1,016.38
15	210.47	1.09	209.38
16	449.33	2,036.15	(1,586.82)
17	675.28	(16.11)	691.39
18	2,564.48	(4,971.42)	7,535.90
19	7,664.06	(6,419.86)	14,083.92
20	816.28	(2,908.10)	3,724.38
21	203.70	(11,789.31)	11,993.01
22	143.27	(445.82)	589.09
23	2,730.48	(115.84)	2,846.32
24	2,604.66	_	2,604.66
25	1,309.90	(182.91)	1,492.81
26	926.45	(85.01)	1,011.46
27	1,968.66	(5,477.61)	7,446.27
28	1,667.71	(16,808.45	
29	294.89	(728.19	1
30	217.71	1,842.76	(1,625.05)
31	4,581.51	-	4,581.51
Total	(125,768.30	(39,204.06	(86,564.24)

Day-Ahead Loss Rebate on Carve-Out Grandfathered Agreements

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Day of	pm 48 . % %	Fautha Manth	Change
the	For the Month of May (\$)	of April (\$)	April (\$)
Month	(39,998.24)	(58,868.63)	18,870.39
1	(75,922.09)	(41,365.13)	(34,556.96)
2 3	(68,202.02)	(36,742.21)	(31,459.81)
4	(61,432.45)	(85,018.24)	23,585.79
5	(60,782.98)	(102,915.91)	42,132.93
6	(64,560.51)	(93,704.68)	29,144.17
7	(50,709.87)	(80,331.88)	29,622.01
8	(45,024.17)	(85,493.40)	40,469.23
9	(82,795.99)	(42,369.25)	
10	(89,089.88)	(35,648.53)	(53,441.35)
11	(83,338.16)	(87,458.29)	
12	(82,525.19)	(80,774.80)	
13	(64,104.93)	(83,759.59)	
14	(42,028.87)		
15	(37,713.90)		
16	(67,095.99)		
17	(51,329.63)		
18	(52,762.58)		1
19	(62,599.95)		
20	(69,435.52)		
21	(34,225.70)		
22	(30,706.50)		
23	(60,086.19)		
24	(57,072.53)		
25	(53,411.39)	T	1
26	(58,274.30)	<u> </u>	
27	(59,927.85)		
28	(33,168.66)		
29	(33,885.08)		
30	(34,714.95		9,382.89
31	(70,007.05		(70,007.05)
Total	(1,776,933.12	(2,222,542.70	445,609.58

Day-Ahead Congestion Rebates on Option B Grandfathered Agreements

Day of the Month	For the Month of May (\$)	For the Month of April (\$)	Change from May to April (\$)
1	(2,045.57)		(2,045.57)
2	(45,552.65)	(1,798.76)	(43,753.89)
3	(29,105.55)	(2.02)	(29,103.53)
4	(7,177.60)	6.16	(7,183.76)
5	(10,203.67)	(1,010.71)	(9,192.96)
6	(15,413.99)		39,387.71
7	(5,786.30)		7,758.94
8	(2,780.23)		51,545.98
9	(41,399.38)	(2,138.27)	(39,261.11)
10	(78,917.88)	T	(76,447.06)
11	(38,847.39)		(30,152.37)
12	(6,112.35)		8,062.20
13	(22,756.87)		55,052.92
14	(4,646.45)		9,162.51
15	(1,164.82)	(14,034.31)	12,869.49
16	(9,652.24)	(1,471.01)	(8,181.23)
17	(8,230.15)	(118.07)	(8,112.08)
18	(6,889.07)	(36,951.63)	30,062.56
19	(14,045.99)	(10,699.45)	(3,346.54)
20	(10,766.28)	(18,837.43)	8,071.15
21	(5,688.75	(32,477.45)	26,788.70
22	(1,800.44	(2,053.29)	
23	(11,698.31	254.06	(11,952.37)
24	(11,172.05)	(11,172.05)
25	(5,057.80) (84.23)	(4,973.57)
26	(8,610.40	(2.17)	
27	(7,459.15) (2,938.36	
28	(6,203.38) (48,905.85	
29	(295.38	(499.75)	
30	(200.41	(48.43)	
31	(24,071.75		(24,071.75)
Total	(443,752.25	(413,443.26) (30,308.99)

Day-Ahead Loss Rebate on Option B Grandfathered Agreements

			Change
Day of	For the Month	For the Month	
the Month	of May (\$)	of April (\$)	April (\$)
1	(7,109.07)	(23,655.33)	16,546.26
2	(23,619.20)		(365.42)
3	(30,149.85)		
4	(15,092.95)		22,246.30
5	(19,979.22)		
6	(23,991.75)		
7	(24,796.65)		
8	(21,980.66)		
9	(32,624.08)	1	
10	(33,263.67)		
11	(37,398.35)		
12	(35,967.91)		
13	(22,635.66)		
14	(16,385.60)		1
15	(17,508.10)		6,721.66
16	(31,957.33)		
17	(24,359.95)	T	(7,449.51)
18	(15,285.82)		10,568.28
19	(28,948.25)		(2,100.91)
20	(30,823.33)		(7,668.80)
21	(22,893.74)	(23,139.74)	246.00
22	(16,240.86)		27,011.22
23	(28,396.29)		(4,630.63)
24	(27,471.47		(15,654.01)
25	(17,698.08	T	20,027.75
26	(27,698.24	(32,642.62	4,944.38
27	(26,672.48		7,240.18
28	(6,962.59) (32,210.79) 25,248.20
29	(4,451.96) 6,912.17
30	(9,687.51) (8,124.32) (1,563.19)
31	(14,961.66		(14,961.66)
Total	(697,012.28	(830,497.28) 133,485.00

Day-Ahead Revenue Sufficiency Guarantee Distribution Amount

Day of			Change
the			from May to
Month	of May (\$)	of April (\$)	April (\$)
11	284,682.68	32,044.27	252,638.41
2	58,390.54	45,660.86	12,729.68
3	14,225.35		14,225.35
4	69,052.14	76,637.27	(7,585.13)
5	17,568.54	35,776.44	(18,207.90)
6	6,469.85	280,136.57	(273,666.72)
7	19,828.96	201,660.00	(181,831.04)
8	59,432.71	8,236.35	51,196.36
9	60,002.87	4,562.77	55,440.10
10	172,629.73	152,650.74	19,978.99
11	145,187.63	17,013.96	128,173.67
12	102,834.23	1,188.26	101,645.97
13	142,937.15	12,386.54	130,550.61
14	202,372.05	30,305.75	172,066.30
15	230,847.74	75,972.09	154,875.65
16	52,151.75	6,148.79	46,002.96
17	273,115.93	199,298.24	73,817.69
18	150,870.63	134,488.19	16,382.44
19	19,177.51	70,278.43	(51,100.92)
20	7,032.40	276,003.07	(268,970.67)
21		162,631.56	(162,631.56)
22	333,575.46	154,954.38	178,621.08
23	6,852.73		(48,973.33)
24	112,897.99		(186,998.16)
25	12,632.67		(65,083.98)
26	39,517.10		
27	6,585.63		
28	11,103.86		1
29	7,066.65		
30	197,670.06		
31	195,665.32		195,665.32
Total	3,012,377.86		_

Financial Transmission Rights Hourly Payment for the Month

Day of the Month	For the Month of May (\$)	For the Month of April (\$)	Change from May to April (\$)
1	(532,901.60)	-	(532,901.60)
2	(2,227,125.43)	(22,876.83)	(2,204,248.60)
3	(1,397,007.14)	(21,962.20)	(1,375,044.94)
4	(498,282.82)	(729.05)	(497,553.77)
5	(615,356.55)	(37,368.39)	(577,988.16)
6	(264,309.25)	(483,671.05)	219,361.80
7	(392,069.95)	(479,398.09)	87,328.14
8	(98,126.73)	(553,501.10)	455,374.37
9	(636,532.71)	(205,985.44)	(430,547.27)
10	(1,222,462.18)	(15,863.83)	(1,206,598.35)
11	(757,999.47)	(49,433.29)	(708,566.18)
12	(872,464.90)	(358,678.38)	(513,786.52)
13	(322,415.81)	(610,440.51)	288,024.70
14	(352,372.40)	(71,092.41)	(281,279.99)
15	(189,581.93)	(131,871.11)	(57,710.82)
16	(221,782.42)	(62,180.30)	
17	(344,921.28)	(392.32)	(344,528.96)
18	(148,397.50)	(554,245.35)	405,847.85
19	(168,453.83)	(239,045.12)	70,591.29
20	(141,241.25)	(384,070.27)	242,829.02
21	(278,937.50)	(338,345.99)	59,408.49
22	(3,012.17)	(33,752.48)	30,740.31
23	(118,472.37)	(15,775.67)	
24	(221,581.39)	(839.00)	(220,742.39)
25	(77,823.87)	(9,721.38)	
26	(113,178.76)		
27	(72,875.58	(182,936.59)	
28	(117,766.05	(1,448,022.05)	
29	17,913.59	15,104.71	2,808.88
30	7,430.38	(53,256.77)	
31	(708,441.26		(708,441.26)
Total	(13,090,550.13	(6,398,374.26)	(6,692,175.87)

Distribution on Overcollected Losses Amount

Day of the Month	For the Month of May (\$)	For the Month of April (\$)	Change from May to April (\$)
11	(764,975.53)	(1,144,074.10)	379,098.57
2	(1,578,146.48)	(1,105,652.03)	(472,494.45)
3	(1,425,855.90)	(1,068,246.29)	(357,609.61)
4	(1,369,736.89)	(1,560,993.39)	191,256.50
5	(1,411,529.13)	(1,822,074.04)	410,544.91
6	(1,412,855.59)	(1,596,186.37)	183,330.78
77	(989,336.21)	(1,324,955.96)	335,619.75
8	(883,131.50)	(1,346,634.24)	463,502.74
9	(1,833,226.59)	(831,501.07)	(1,001,725.52)
10	(1,848,525.58)	(632,961.06)	(1,215,564.52)
11	(1,646,831.73)	(1,676,944.06)	30,112.33
12	(1,517,167.31)	(1,529,352.78)	12,185.47
13	(1,300,489.31)	(1,510,194.04)	209,704.73
14	(925,384.19)	(1,557,960.08)	632,575.89
15	(693,519.96)	(1,208,143.34)	514,623.38
16	(1,346,524.74)	(850,742.05)	(495,782.69)
17	(1,098,475.84)	(692,054.88)	(406,420.96)
18	(1,288,448.83)	(1,856,285.68)	567,836.85
19	(1,462,170.65)	(1,853,559.03)	
20	(1,379,617.00)	(1,597,760.61)	218,143.61
21	(972,726.27)	(1,596,556.50)	623,830.23
22	(725,981.87)	(1,416,954.38)	690,972.51
23	(1,366,225.06)		
24	(1,303,005.98)	(1,190,101.12)	(112,904.86)
25	(1,252,107.00)	(1,943,231.48)	691,124.48
26	(1,334,085.20)	1	1
27	(1,174,028.13)	T	479,509.84
28	(697,858.97)	(1,592,101.84)	894,242.87
29	(647,631.31)	(1,488,928.45)	841,297.14
30	(632,889.41)		319,474.53
31	(1,348,550.22)		(1,348,550.22)
Total	(37,631,038.38)	(41,580,732.48)	3,949,694.10

Real-Time Congestion Rebate on Carve-Out Grandfathered Agreements

Month	For the Month of May (\$)	For the Month of April (\$)	Change from May to April (\$)
1	10.99	(3,466.23)	3,477.22
2	184.20	(4,387.48)	4,571.68
3	209.14	(636.24)	845.38
4	403.25	(51.88)	455.13
5	(178.09)	(990.79)	812.70
6	(373.23)	(319.80)	(53.43)
7	(56.36)	(89.18)	32.82
8	(2.60)	(386.03)	383.43
9	(32.99)	(497.38)	464.39
10	1.20	(226.68)	227.88
11	(0.93)	1,721.65	(1,722.58)
12	9.67	4,234.53	(4,224.86)
13	46.70	78.69	(31.99)
14	481.05	80.28	400.77
15	37.15	72.45	(35.30)
16	1,141.55	(612.94)	1,754.49
17	188.30	0.27	188.03
18	(15.28)	(137.50)	122.22
19	(18.73)	(1,070.34)	1,051.61
20	(10.51)	(18.38)	7.87
21	(35.20)	(0.59)	(34.61)
22	(0.04)	-	(0.04)
23	(107.79)	(58.08)	
24	(8.27)	(22.68)	14.41
25	(194.32)	(137.21)	
26	(9.98)	(146.24)	
27	(0.34)	(1,378.27)	
28	6.20	54.62	(48.42)
29	18.27	***	18.27
30	0.16	(8.92)	
31	1.84		1.84
Total	1,695.01	(8,400.35)	10,095.36

Real-Time Loss Rebate on Carve-Out Grandfathered Agreements

			Change
Day of the Month	For the Month of May (\$)	of April (\$)	April (\$)
1	(30.38)	(4,637.43)	4,607.05
2	(5.39)	(8,103.77)	8,098.38
3	(14.78)	(369.19)	354.41
4	373.93	135.52	238.41
5	(66.86)	214.29	(281.15)
6	(1,715.52)	1,467.23	(3,182.75)
7	(24.97)	787.98	(812.95)
8	(22.86)	743.16	(766.02)
9	(19.70)	225.65	(245.35)
10	(21.07)	484.29	(505.36)
11	(2.77)	(2,721.72)	2,718.95
12	(45.86)	(1,094.78)	1,048.92
13	(20.94)	14.36	(35.30)
14	111.94	(6.93)	118.87
15	1.31	(18.44)	19.75
16	174.63	568.87	(394.24)
17	(124.80)	14.28	(139.08)
18	(69.70)	(95.25)	25.55
19	(122.82)	(460.76)	337.94
20	(0.96)	(58.22)	57.26
21	27.81	(51.22)	79.03
22	1.11	(118.31)	119.42
23	(31.71)	(97.78)	66.07
24	(22.46)	20.66	(43.12)
25	(47.68)	44.57	(92.25)
26	(6.03)	(221.29)	215.26
27	(20.77)	351.90	
28	0.20	(8.96)	
29	13.11	(150.21	
30	(665.27)	(68.71)	
31	(133.95		(133.95)
Total	(2,533.21	(13,210.21) 10,677.00

Real-Time Net Inadvertent Distribution Amount

Day of the Month	For the Month of May (\$)	For the Month of April (\$)	Change from May to April (\$)
1	(209,092.40)	(314,516.62)	105,424.22
2	(40,303.90)	(124,246.29)	83,942.39
3	(11,692.88)	(14,891.54)	3,198.66
4	(55,341.57)	1,708.53	(57,050.10)
5	(243,280.30)	66,085.26	(309,365.56)
6	(325,455.22)	76,554.56	(402,009.78)
7	(2,275.51)	97,671.74	(99,947.25)
8	(195,039.44)	300,437.19	(495,476.63)
9	(49,045.23)	115,262.51	(164,307.74)
10	(12,026.53)	(47,203.59)	35,177.06
11	84,418.26	(41,548.32)	125,966.58
12	(12,736.78)	(45,629.92)	32,893.14
13	(137,885.50)	(76,379.32)	(61,506.18)
14	(70,226.61)	264,298.97	(334,525.58)
15	(54,918.24)	17,022.12	(71,940.36)
16	(79,825.82)	(2,354.77)	(77,471.05)
17	12,547.07	138,899.55	(126,352.48)
18	(154,118.39)	345,864.55	(499,982.94)
19	(183,950.28)	(231,856.72)	47,906.44
20	(124,580.75)	632,585.49	(757,166.24)
21	(101,966.18)	(257,376.50)	155,410.32
22	(235,770.68)	297,575.93	(533,346.61)
23	(246,017.44)	104,706.41	(350,723.85)
24	(322,419.31)	(28,381.37)	(294,037.94)
25	(317,835.24)	(102,820.16)	(215,015.08)
26	(12,768.14)	479,354.81	(492,122.95)
27	(82,795.87)		122,235.99
28	(77,325.56)	(402,639.34)	325,313.78
29	(39,321.51)	(37,317.23)	(2,004.28)
30	(138,870.52)	175,695.95	(314,566.47)
31	(56,139.60)		(56,139.60)
Total	(3,496,060.07) 1,181,530.02	(4,677,590.09)

Revenue Neutrality Uplift Amount

Day of the Month	For the Month of May (\$)	For the Month of April (\$)	Change from May to April (\$)
1	538,000.94	998,192.51	(460,191.57)
2	683,342.39	1,063,316.98	(379,974.59)
3	905,054.51	507,281.20	397,773.31
4	865,206.99	861,862.38	3,344.61
5	1,287,544.83	699,026.47	588,518.36
6	1,320,575.64	654,883.92	665,691.72
7	548,312.32	656,470.19	(108,157.87)
8	726,453.76	281,408.03	445,045.73
9	1,626,841.79	243,999.52	1,382,842.27
10	1,742,751.58	265,202.87	1,477,548.71
11	697,718.91	1,121,621.58	(423,902.67)
12	1,211,406.87	1,458,270.74	(246,863.87)
13	1,183,144.01	1,392,379.76	(209,235.75)
14	601,249.54	913,611.31	(312,361.77)
15	432,259.48	683,290.77	(251,031.29)
16	914,443.56	496,854.53	417,589.03
17	729,252.46	249,824.77	479,427.69
18	1,169,637.47	666,580.26	503,057.21
19	1,482,677.84	1,383,307.11	99,370.73
20	1,093,683.58	552,067.61	541,615.97
21	565,704.49	1,407,226.46	(841,521.97)
22	742,738.80	655,008.73	87,730.07
23	1,573,803.38	873,010.18	700,793.20
24	1,157,585.51	627,533.80	530,051.71
25	1,261,756.04	1,063,962.59	197,793.45
26	1,438,726.19	1,368,362.90	70,363.29
27	952,531.03	861,941.74	90,589.29
28	462,099.11	1,506,157.79	(1,044,058.68)
29	491,088.29	1,042,260.61	(551,172.32)
30	533,877.01	319,661.04	214,215.97
31	894,255.90	_	894,255.90
Total	29,833,724.22	24,874,578.35	4,959,145.87

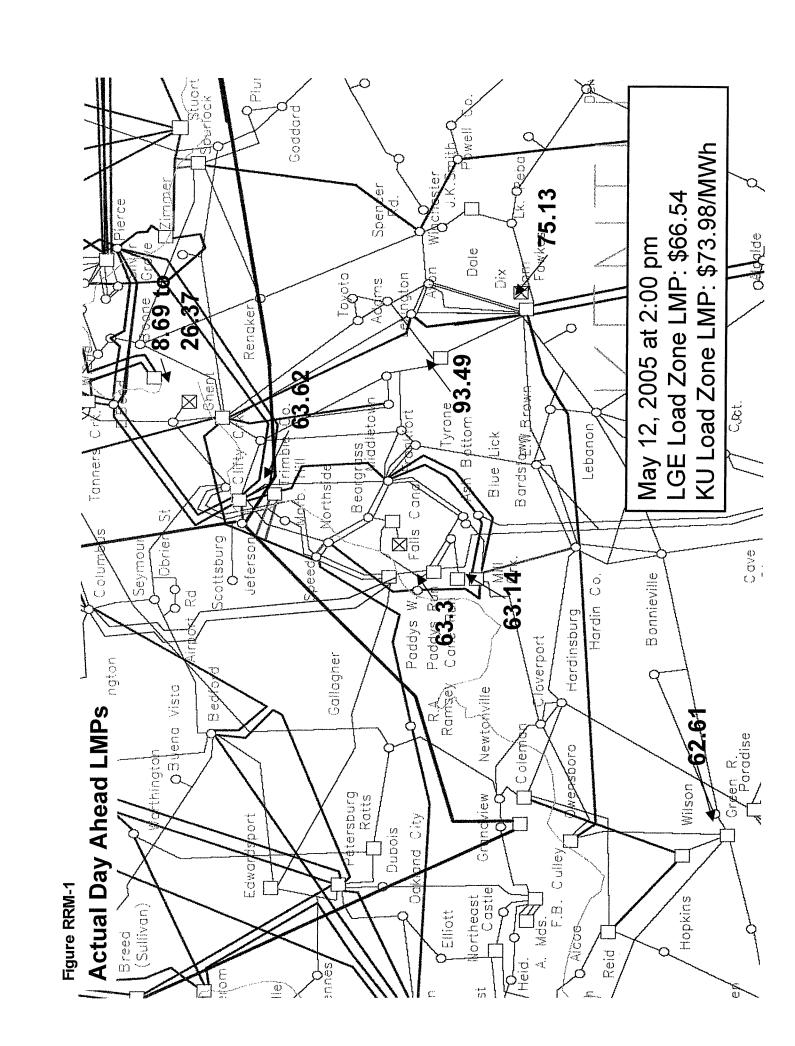
Real-Time Revenue Sufficiency Guarantee Distribution Amount

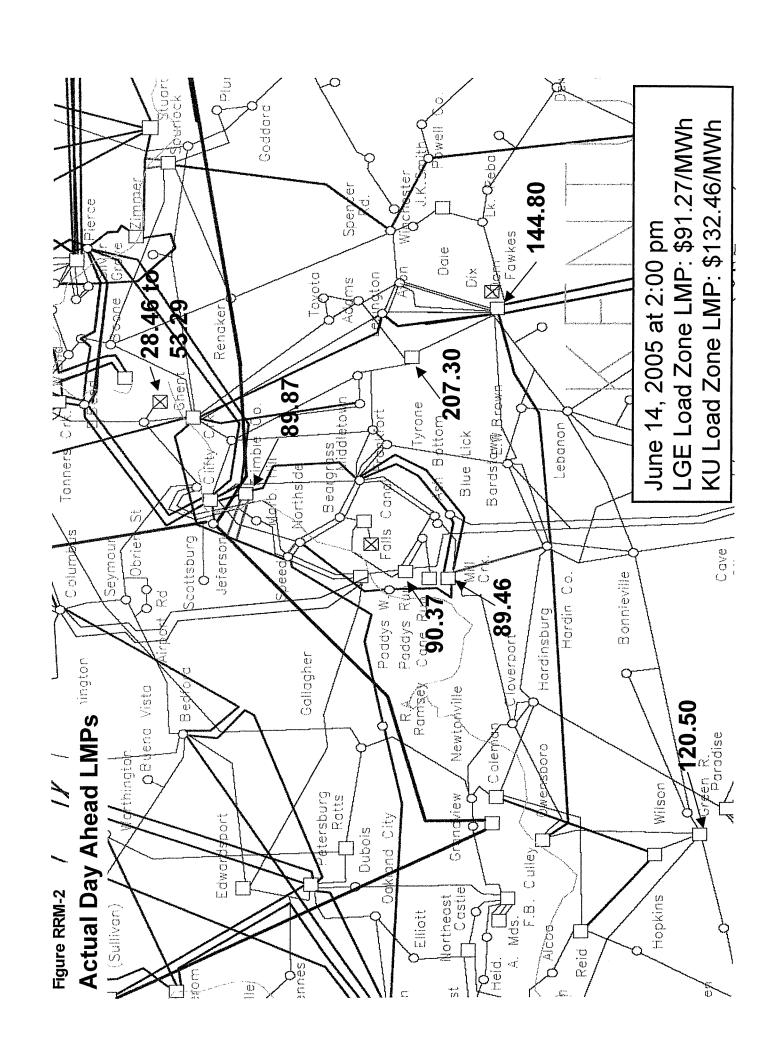
Day of			Change from
the	For the Month		May to April
Month	of May (\$)	of April (\$)	(\$)
1	676,208.53	754,351.63	(78,143.10)
2	724,395.55	859,559.41	(135,163.86)
3	261,830.54	269,393.33	(7,562.79)
4	430,343.65	1,302,330.34	(871,986.69)
5	379,624.95	137,600.93	242,024.02
6	448,356.14	521,621.45	(73,265.31)
7	819,638.36	946,640.30	(127,001.94)
8	737,711.31	158,201.57	579,509.74
9	737,535.99	197,745.39	539,790.60
10	1,297,127.31	251,742.19	1,045,385.12
11	1,421,282.72	1,719,319.88	(298,037.16)
12	491,881.72	863,336.79	(371,455.07)
13	743,789.68	1,324,869.59	(581,079.91)
14	272,589.66	1,002,380.94	(729,791.28)
15	551,425.09	834,790.87	(283,365.78)
16	648,264.85	355,109.68	293,155.17
17	758,618.90	483,510.24	275,108.66
18	722,888.43	934,126.18	(211,237.75)
19	1,048,361.63	845,722.55	202,639.08
20	416,147.64	1,131,293.63	(715,145.99)
21	363,851.07	609,083.32	(245,232.25)
22	491,584.56	2,026,369.25	(1,534,784.69)
23	854,232.93	1,027,945.63	(173,712.70)
24	1,147,531.20	725,545.14	421,986.06
25	1,148,755.16		71,381.28
26	982,375.94	1	396,254.74
27	868,793.11	1,057,181.89	(188,388.78)
28	418,369.23	779,606.74	(361,237.51)
29	517,601.72		372.40
30	422,339.65		(354,882.12)
31	1,011,346.94		1,011,346.94
Total	21,814,804.16		(2,262,520.87)

Uninstructed Deviation Amount

Day of			Change
the	For the Month	For the Month	from May to
Month	of May (\$)	of April (\$)	April (\$)
1	21,987.74	71,245.08	(49,257.34)
2	52,412.18	107,721.01	(55,308.83)
3	51,714.28	81,697.52	(29,983.24)
4	27,851.57	124,904.93	(97,053.36)
5	35,266.05	91,042.20	(55,776.15)
6	29,046.20	61,763.51	(32,717.31)
7	23,878.27	39,875.89	(15,997.62)
8	32,564.17	35,266.77	(2,702.60)
9	37,082.18	38,153.98	(1,071.80)
10	36,516.53	72,084.32	(35,567.79)
11	52,273.61	98,615.21	(46,341.60)
12	31,963.23	58,441.42	(26,478.19)
13	41,623.62	28,377.05	13,246.57
14	16,685.27	65,539.39	(48,854.12)
15	17,310.04	81,559.41	(64,249.37)
16	19,206.17	56,590.95	(37,384.78)
17	33,871.67	29,938.66	3,933.01
18	34,514.33	60,161.51	(25,647.18)
19	91,482.10	99,859.66	(8,377.56)
20	41,849.50	48,596.52	(6,747.02)
21	23,916.88	67,203.01	(43,286.13)
22	19,646.45	91,910.48	(72,264.03)
23	33,248.04	64,822.13	(31,574.09)
24	28,545.14	36,605.23	(8,060.09)
25	62,399.93	84,632.09	(22,232.16)
26	49,031.10		(30,932.88)
27	21,996.91	70,280.21	(48,283.30)
28	22,239.89	64,926.55	(42,686.66)
29	7,838.52		(40,746.98)
30	28,459.17		(6,489.08)
31	72,717.61		72,717.61
Total	1,099,138.35		(896,174.07)







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COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

in the Matter of:		
INVESTIGATION INTO THE MEMBERSHIP OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY)	2002 0000 0000
UTILITIES COMPANY IN THE MIDWEST)	CASE NO. 2003-00266
INDEPENDENT TRANSMISSION SYSTEM)	
OPERATOR, INC.)	

UPDATED SUPPLEMENTAL TESTIMONY OF ROGER C. HARSZY,

VICE PRESIDENT OF REAL TIME OPERATIONS,
MIDWEST INDEPENDENT TRANSMISSION SYSTEM OPERATOR, INC.

July 7, 2005

1	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	A.	My name is Roger C. Harszy. I work at 701 City Center Drive, Carmel, Indiana 46032.
3	Q.	BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?
4	A.	I am the Vice President of Real Time Operations for the Midwest Independent
5		Transmission System Operator, Inc. (the "Midwest ISO").
6	Q.	PLEASE SUMMARIZE YOUR EDUCATIONAL AND PROFESSIONAL
7		BACKGROUND.
8	A.	I graduated from the University of Illinois with a bachelor of science's degree in
9		Electrical Engineering. Before my employment with the Midwest ISO, I was Manager of
10		Operations in the Energy Supply Operations Department of Ameren Corporation.
11		Additionally, I have served as Chairman of the MAIN Operating Committee, and I am
12		the current Chairman of NERC's Operations Reliability Subcommittee.
13	Q.	PLEASE DESCRIBE YOUR RESPONSIBILITIES WITH THE MIDWEST ISO
14		AS THEY RELATE TO THIS FILING.
15	A.	I was previously the Midwest ISO Director responsible for area operations. In that
16		regard, it was my responsibility to oversee the Midwest ISO's day-to-day transmission

operations so that the Midwest ISO operated in a manner consistent with the safe and

Engineering and Planning, responsible for engineering, modeling and planning. In

system operations for the Midwest ISO.

reliable operation of the regional grid. In October 2003, I became Executive Director of

September 2004, I assumed my present duties, which involve supervision of all real time

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1	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?			
2	A.	I explain, from an operational perspective, that reliability on that portion of the regional			
3		grid located in the State of Kentucky has been enhanced by KU and LG&E participating			
4		as members of the Midwest ISO, including participation in the Midwest ISO energy			
5		market, to the benefit of Kentucky retail customers.			
6	Q.	HAVE YOU PREVIOUSLY TESTIFIED IN THIS PROCEEDING?			
7	A.	Yes, I submitted direct testimony dated December 29, 2003 regarding the reliability			
8		benefits to KU and LG&E of membership in the Midwest ISO, prior to the start-up of the			
9		energy market.			
10	Q.	HAVE YOU READ THE TESTIMONY OF RONALD R. MCNAMARA			
11		SUBMITTED IN THIS PROCEEDING?			
12	A.	Yes, I have read Dr. McNamara's Testimony.			
13	Q.	DO YOU AGREE WITH DR. MCNAMARA'S TESTIMONY?			
14	A.	Yes, I do. My expertise lies within operations and engineering and, to the extent that Dr.			
15		McNamara's testimony touches upon operation issues generally, or operation of the			
16		Midwest ISO grid in particular, I agree with his conclusions.			
17	Q.	HAVE RELIABILITY BENEFITS ACCRUED TO KENTUCKY WITH THE			
18		BEGINNING OF THE MIDWEST ISO ENERGY MARKET?			
19	A.	Although the energy market is only a few months old, and still in the midst of its first			
20		peak season, membership in the Midwest ISO and its energy market has produced the			
21		following reliability benefits for Kentucky:			
22		a) Provided a regional security-constrained economic dispatch to manage congestion			
23		and loop flows through Kentucky and the wider region;			

1		b)	Effectively monitored the grid region-wide to detect and quickly solve local
2			problems before they became more severe (or catastrophic) regional problems;
3		c)	More effectively coordinated flows between utility systems within the regional
4			footprint; and
5		d)	Through the regional dispatch, allowed transmission to operate closer to security
6			limits while providing regional monitoring and dispatch to ensure flows stayed
7			within safe operating security limits.
8	Q.	PLEA	ASE EXPLAIN HOW THE MIDWEST ISO HAS IMPROVED THE
9		MAN	AGEMENT OF LOOP FLOWS AND CONGESTION IN THE KENTUCKY
10		REG]	ION.
11	A.	The M	Aidwest ISO has required PJM to calculate the PJM market-flow impacts on
12		facilit	ties outside the PJM market and provide these impacts (down to 0%) to the
13		Interc	change Distribution Calculator ("IDC") in order that these impacts may be reduced
14		along	with point-to-point transactions normally curtailed through Transmission Loading
15		Relie	f ("TLR"). This is especially significant to Kentucky with the expansion of the PJM
16		marke	et, as there are large impacts on the Kentucky electric system from generation
17		locate	ed in Northern Illinois, Virginia, Ohio, and southern Indiana (AEP) that otherwise
18		could	not be reduced.
19			
20		The M	Midwest ISO was instrumental in reforming the TLR process to allow for the
21		reduc	ction of non-tagged market flows that impact surrounding areas comparably with
22		tagge	ed transactions. Without this substantial revision of the TLR process, Kentucky
23		facili	ties could be overrun with PJM market flows with no way to reduce them.

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Because of Midwest ISO's efforts in the revision of the TLR process, TLR has now become a tool for applying equity in the curtailment of market flows, as well as tagged transactions, rather than a tool for curtailing only tagged transactions while allowing market flows to continue unaffected. For this reason, TLR now benefits Kentucky by allowing the Midwest ISO to curtail loop flows caused by tagged transactions and PJM market flows impacting LGEE (LGEE is the NERC designation for the LG&E-KU system), rather than dispatching additional LGEE generation at a higher cost to customers to compensate for these flows...

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In May 2005, the Midwest ISO Engineering staff worked with LGEE engineering staff to develop an operating procedure to prevent the threat of voltage instability in the Lexington area caused by heavy north-to-south flows and maintenance outages of several LGEE generating units.

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Also, in May 2005, LGEE was being heavily impacted by tagged transactions flowing from the northern U.S. to the Gulf that exacerbated the voltage instability threat in the Lexington area. The Midwest ISO was able to develop and implement a flowgate (Northeast Kentucky Interface) that identified these transactions and curtailed them through the TLR process, providing essential relief of constrained facilities within LGEE. These capabilities enabled Midwest ISO to work with LG&E-KU to successfully overcome transmission maintenance outages, significant loop flows and higher than

1		normal forced generation outages during this period that had created the threat of voltage
2		collapse in the Kentucky area.
3		
4	Q.	WHAT METHOD DID MISO USE TO DEAL WITH TRANSMISSION
5		CONGESTION PRIOR TO THE ENERGY MARKET?
6	A.	Until the Midwest ISO energy market began operation, the primary tool to relieve
7		congestion was the NERC TLR procedure, which I referred to in my previous answer.
8		This is a detailed, highly complex process that attempts to reduce the impact of
9		transactions on the grid until a problem is resolved and the system returns to a normal
10		state. This can be done by curtailing transactions that have already begun, or by holding
11		transactions that are pending, but have not yet begun to flow.
12		
13		The action levels of TLR range from Level 1, which is an alert notifying other Reliability
14		Coordinators that curtailments are <i>likely</i> to occur, to Level 6, which signals a threat to a
15		widespread area of the Eastern Interconnection, and may include emergency procedures,
16		such as load shedding, to mitigate a constraint.
17		
18		The most common TLR in the Midwest is a Level 3. This can be an action to reallocate
19		transactions based on firmness of service, or to curtail non-firm point-to-point service to
20		mitigate an operating security limit violation.

1	Q.	DID THE MIDWEST ISO HAVE OCCASSION TO USE TLRS IN THE LG&E—
2		KU AREA, PRIOR TO THE ENERGY MARKET?
3	A.	Yes. As I explained in my initial testimony, both before and after LG&E-KU joined the
4		Midwest ISO, there were a number of hours when TLRs were required in the LGEE
5		zone. However, prior to the start of the Midwest ISO energy market, these TLRs directly
6		affected power imports and exports into and out of Kentucky.
7	Q.	WHAT HAS BEEN THE EXPERIENCE REGARDING TLRS SINCE THE
8		ENERGY MARKET HAS BEEN OPERATING?
9	A.	As I noted earlier in my testimony, but for the revisions to the TLR process, the
10		expansion in November 2004 of the PJM market could have resulted in Kentucky
11		facilities being overrun with PJM market flows from PJM generation in Northern Illinois.
12		Virginia, Ohio, and southern Indiana with no way to reduce those flows. Because of the
13		revision to the TLR process, TLR is now a tool for applying equity in the curtailment of
14		market flows and tagged transactions, rather than a tool for curtailing only tagged
15		transactions while allowing market flows to continue unaffected.
16		
17		For this reason, the Midwest ISO now addresses congestion internal to LGEE using
18		market redispatch rather than TLR, while using TLR to curtail loop flows caused by
19		external tagged transactions and PJM market flows impacting LGEE. This avoids
20		dispatching LGEE generation at higher cost to customers to compensate for these
21		external flows.

1	Q.	HOW DOES THE ENERGY MARKET ENHANCE THE ABILITY OF THE
2		MIDWEST ISO TO MONITOR THE REGIONAL GRID AND TO LOCALIZE
3		POTENTIALLY SIGNIFICANT RELIABILITY PROBLEMS?
4	A.	The system-wide monitoring capabilities of the Midwest ISO have allowed Kentucky
5		facilities to be protected from overloads that could be caused from system events
6		occurring outside Kentucky. In the event that the Midwest ISO sees that a loss of
7		facilities outside Kentucky would cause overloads or instability in Kentucky, the
8		Midwest ISO takes action to operate the system in a manner that eliminates these threats.
9		At the same time, the Midwest ISO market allows for much faster relief of overloaded
10		facilities in Kentucky through the use of its regional five-minute dispatch to ensure flows
11		remain within operating security limits.
12		
13		The Midwest ISO now is able to utilize the available generation in the market, from over
14		130,000 MW combined, dispatched every five minutes, to address constraints within the
15		LGEE system with a level of speed and precision that, prior to the Midwest ISO market
16		startup, could never have been accomplished. The Midwest ISO is able to do this with
17		the least cost generation, providing additional value to LGEE customers.
18		
19		In May 2005, shortly after the start of the Midwest ISO energy market, the Midwest ISO
20		worked very effectively with LGEE transmission and generating personnel to address the
21		sudden unavailability of four generating units at the Brown CT sub (due to cracked fan
22		blades) during the same time that Brown Unit #3 was off for maintenance and Brown
23		Unit #2 was forced to come off with mechanical issues. This was causing potential

2 LGEE transmission personnel to develop reconfiguration options to provide relief, 3 also worked closely with LGEE generation personnel to delay the outage of Brown	
also worked closely with LGEE generation personnel to delay the outage of Brown	ТТ
	n Unit
4 #2 by one day – allowing for remaining Brown CT units to be made available to re	educe
congestion in LGEE by responding to LMP price signals in the dispatch algorithm	n.
6 Q. HOW HAS THE ABILITY TO MORE EFFECTIVELY COORDINATE FL	ows
7 BETWEEN SYSTEMS WITHIN THE REGION BENEFITED KENTUCKY	?
8 A. With the implementation of the Joint Operating Agreement ("JOA") between the	
9 Midwest ISO and PJM, facilities within Kentucky are even more protected from b	eing
overloaded by the overselling of transmission service. This is because the Midwe	st ISO
and PJM coordinate their flows on each other's facilities from the planning horizo	n
through real time in order to more effectively prevent overloads caused by over-se	elling.
Also, as part of the JOA, the Midwest ISO and PJM are able to effectively utilize	the
most economic generators in either the Midwest ISO or PJM market footprints to	address
constraints in either market, providing additional cost benefits to Kentucky custom	ners.
16 Q. PLEASE EXPLAIN HOW THE ENERGY MARKET HAS ALLOWED	
17 GREATER USE OF EXISTING TRANSMISSION CAPACITY WITHOUT	
18 CREATING RELIABILTTY PROBLEMS?	
19 A. Through the utilization of the Midwest ISO market five-minute dispatch of availa	ble
generation within the Midwest ISO market footprint, the Midwest ISO is able to a	allow for
transmission facilities to be more effectively loaded to their maximum limits, with	h less
chance of unforeseen overloads. This is accomplished through the Midwest ISO'	S
system model, state estimator that solves every 90 seconds for the entire Midwest	: ISO

1	reliability area and surrounding areas, and real time contingency analysis that is
2	performed every five minutes for the entire Midwest ISO reliability area. The Midwest
3	ISO market systems utilize these applications to dispatch individual generators every five
4	minutes in the most economic manner, while respecting all equipment limits within the
5	Midwest ISO market footprint. In addition to being far more efficient economically, this
6	process allows for constraints to normally be relieved within 10 to 15 minutes, rather than
7	the 30 to 60 minutes required for TLR to provide relief.

8 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

9 A. Yes it does.

STATE OF INDIANA) COUNTY OF HAMILTON)	SS:			
	<u>VERIF</u>	<u>ICATION</u>		
The answers in the foregoing testimony are true and correct to the best of my knowledge				
and belief.		Roger C. Harszy	Harry	
STATE OF INDIANA)		,	
COUNTY OF HAMILTON)			

Subscribed and sworn to before me, a Notary Public, on this 6th day of July 2005.

Darothy M. Shute

DOROTHY M. SHUTE NOTARY PUBLIC, State of Indiana My County of Residence: Hendricks My Commission Expires: May 8, 2009

(SEAL)